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MODERN FIRE PROTECTION

HARRIS SAFETY COMPANY
ENGINEERS CONTRACTORS MANUFACTURERS
NEW YORK

INTRODUCTORY

This Book

aims to cover the subject of

Fire Protection

in every field, and to offer the best

Modern Means

for saving, under all conditions

Life and Property

from destruction or injury by

FIRE

THE APPLIANCES AND STRUCTURES
HEREIN PRESENTED, COMBINE

The Latest Inventions of Modern Science

The Best Judgment of Fire Experts

The Skill of the Finest Artizans

The Practical Experience of Years

WE RESPECTFULLY SOLICIT
YOUR CAREFUL PERUSAL.

HARRIS SAFETY COMPANY

General Offices: St. James Building
26th St. & Broadway, New York
FACTORY: 525-532 W. 28th St., New York

PHILADELPHIA WASHINGTON CHICAGO
BOSTON BALTIMORE ST. LOUIS
ALBANY BUFFALO SAN FRANCISCO

Selling Agencies throughout the World

OCT 9 - 1902

HARRIS PORTABLE SYSTEM FIRE ESCAPES.



PROTECT YOUR HOME
Harris Steel Cable Fire Escapes

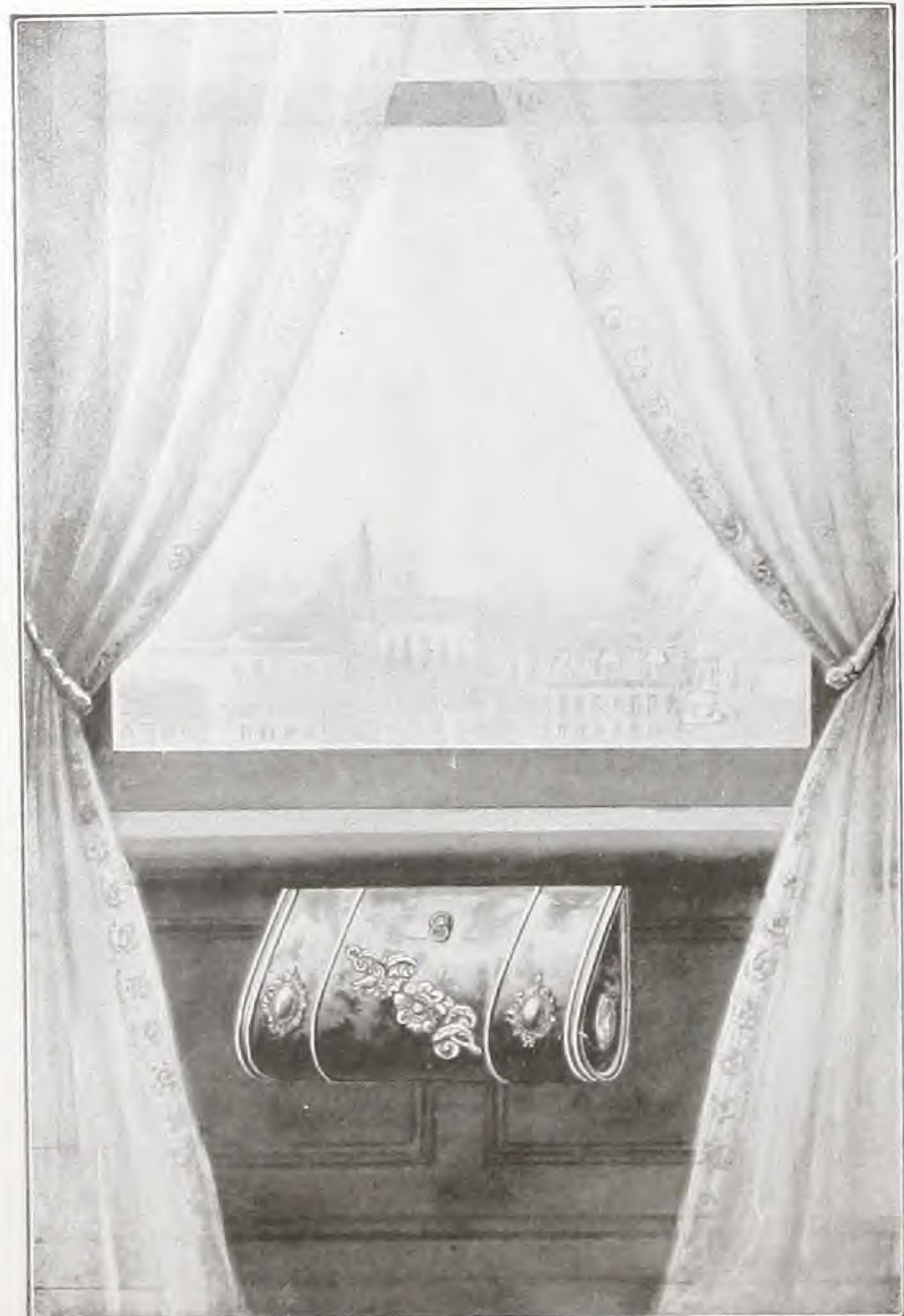
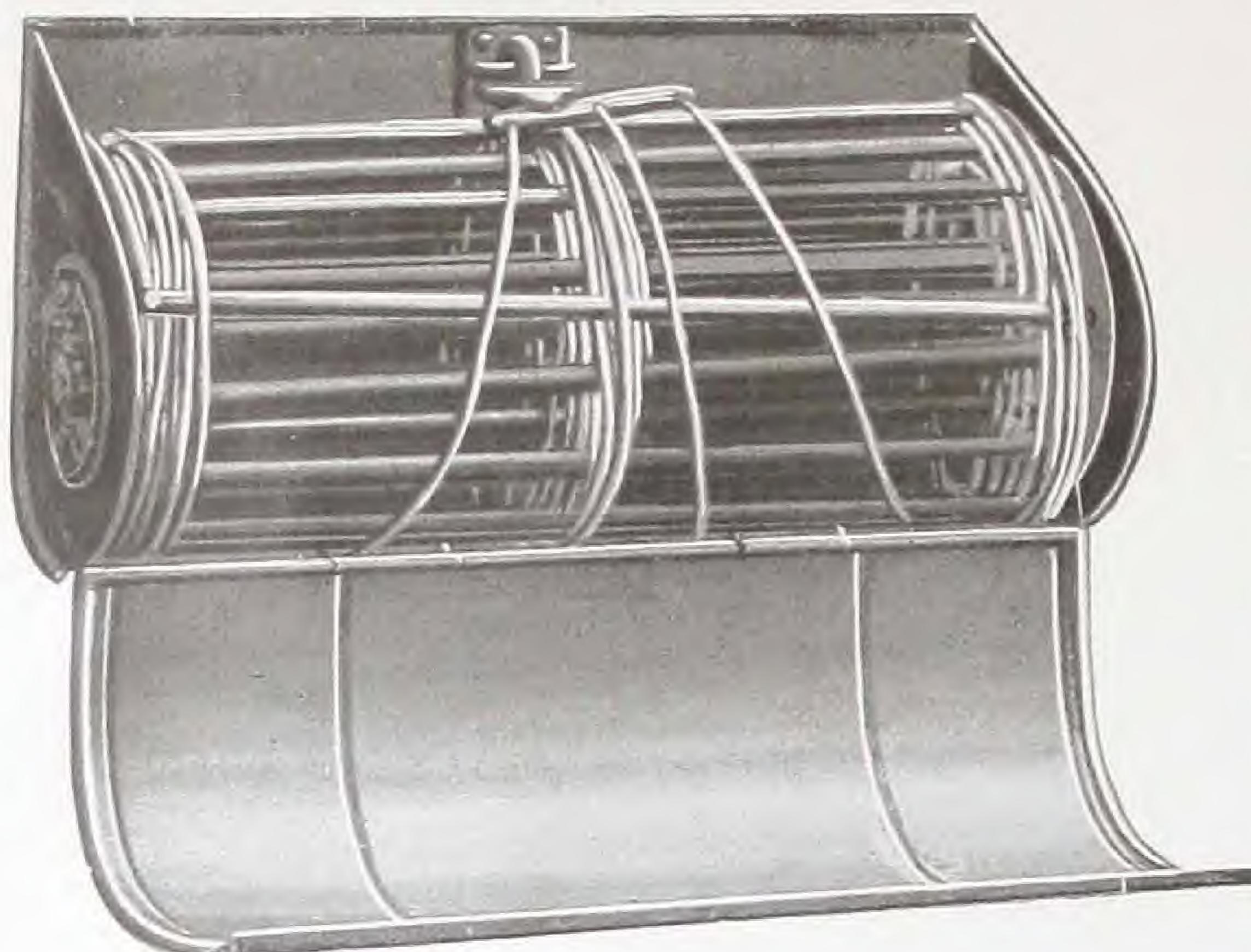
INFALLIBLE

200,000
in use
throughout
the world

INDISPENSABLE

INVALUABLE

INDESTRUCTIBLE



Harris Standard Fire Escapes

Constructed of thoroughly tested, specially flexible, hard drawn-steel wire cables, three in number, to which are securely attached rungs of steel, copper-plated.

The standard testing strength of the HARRIS FIRE ESCAPE IS **2,000 POUNDS.**

The Escape is wound upon a reel, winds and unwinds freely, is very compact, is enclosed in a handsome oxidized ornamental metallic case, and is securely fastened beneath the window-sill inside the house, ready for instant use.

The only simple, practical and absolutely reliable fire escape. Never out of order. Instantly available. Will not mildew or rot. Is moth-proof. Rodents cannot destroy it. It will not break. It cannot burn. A child can use it. It is the most durable, the safest; hence the cheapest and best, for surely in fire escapes, fire alarms, and fire extinguishers "the best is the cheapest."

PRICES of Harris Standard Fire Escapes

	Price		Price
10 feet	\$15.00	30 feet.....	\$20.00
15 "	16.25	35 "	21.25
20 "	17.50	40 "	22.50
25 "	18.75	45 "	23.75
		50 feet.....	\$25.00

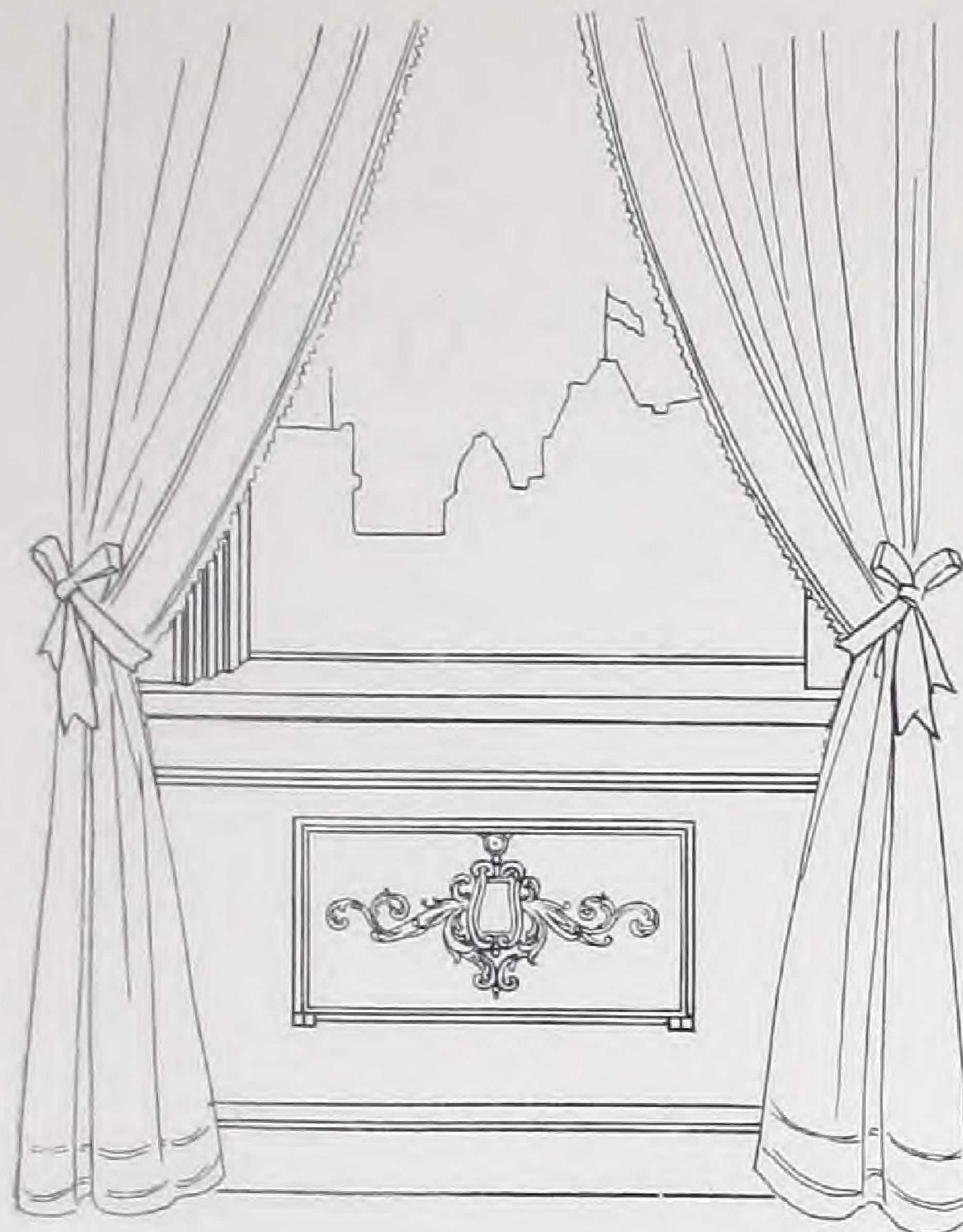
Over 50-ft. lengths, heavier cables and materials are used. Combined tensile strength of three cables, 4,290 pounds.

	Price		Price
55 feet.....	\$27.50	80 feet.....	\$40.00
60 "	30.00	85 "	42.50
65 "	32.50	90 "	45.00
70 "	35.00	95 "	47.50
75 "	37.50	100 "	50.00

To compute price of greater lengths, add 50 cents per foot to price of 100-ft. Escape.

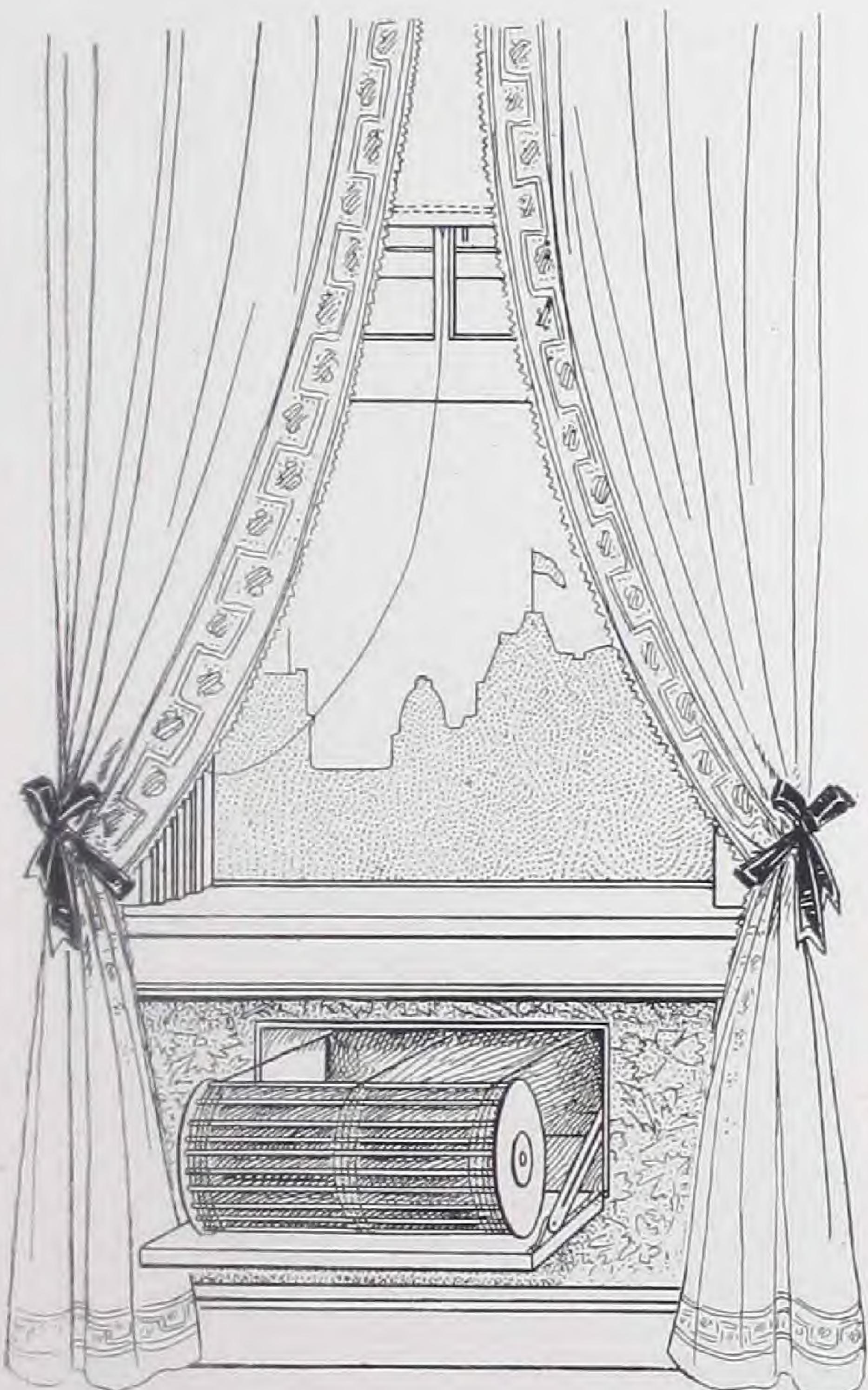
Prices net F. O. B. New York,
Packed for Shipment.

Installation Free in Greater New York



The Harris “Push-Button” Fire Escape

Is similarly constructed to the Harris Standard Escape, and is enclosed in a metallic case “built-in” within the interior walls and underneath window-sill. To the metallic front of case is fastened a panel corresponding with the woodwork or finish of room. The case is opened by operating an inconspicuous push-button on front of the panel. Instantly upon pushing the button, the door or front of case drops to a horizontal position, and the Fire Escape, which is compactly wound on a reel, rolls out and is thrown out of the window; the lid or front of case becomes a step for use in reaching the Fire Escape, which affords a perfect and indestructible means of safety.



Among the many thousands of satisfactory equipments with the

Harris “Push-Button” Fire Escape

we refer to the beautiful new hotel

“Briarcliff Lodge,”

Walter W. Law, Owner,

BRIARCLIFF MANOR ON HUDSON

PRICES of Cases, Panels and Fixtures

Price

No. 15, all lengths of Fire Escapes, to 50 feet (case, panel and fixtures only)	\$14.00
No. 16, all lengths of Fire Escapes, from 50 feet to 75 feet (case, panel and fixtures only)	15.00
No. 17, all lengths of Fire Escapes, from 75 feet to 100 feet (case, panel and fixtures only)	16.00

To above add price of Standard Fire Escapes of lengths desired. (See opposite page.)

Cost of installation extra.

Installation can be made during construction or after completion.

Scale Drawings for Architects
Supplied Without Cost.

Estimates Furnished Upon Request



Demonstration of Harris Fire Escapes.

Do not disfigure buildings, as do the old-style balcony fire escapes.

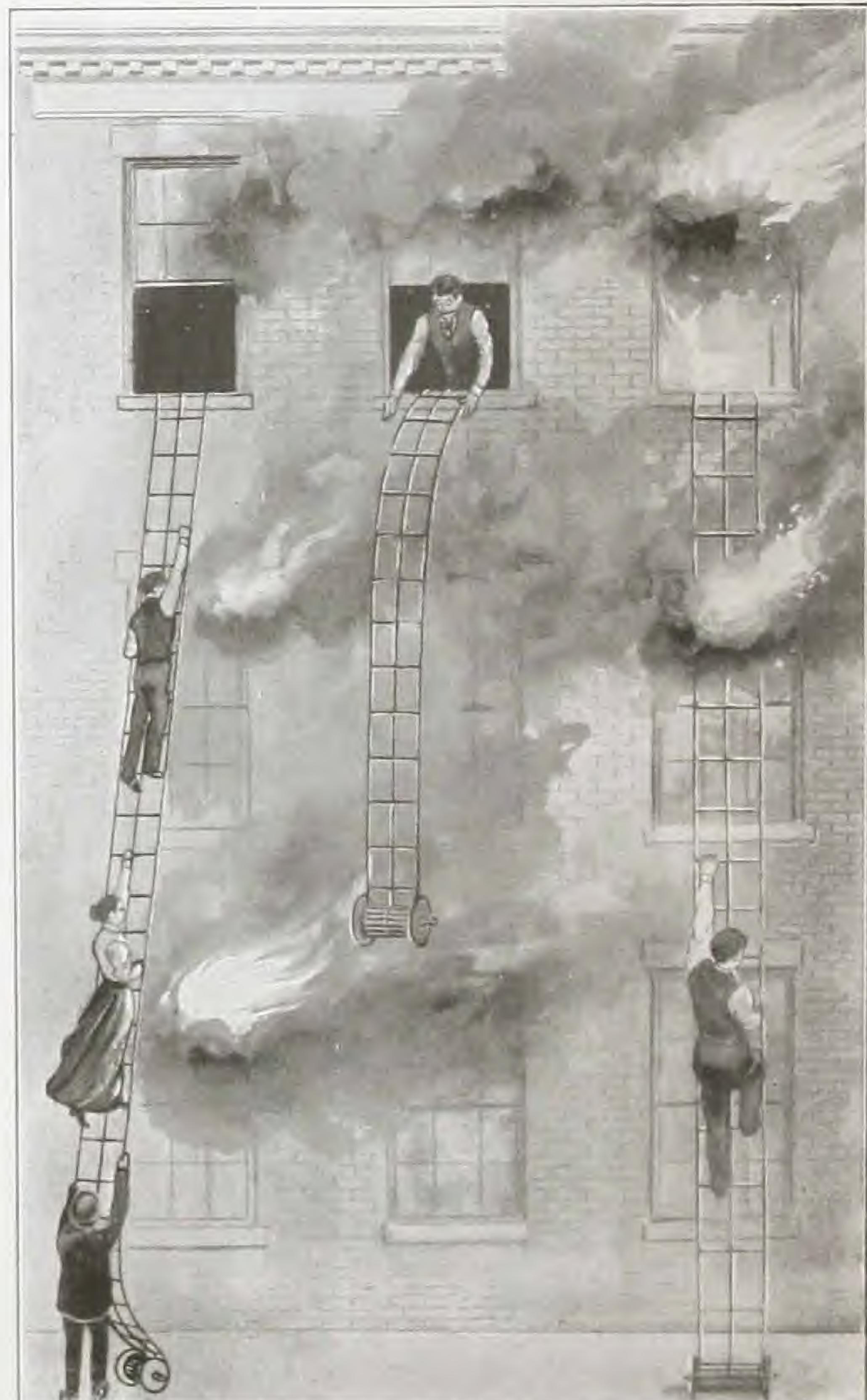
When not in use the HARRIS FIRE ESCAPES are enclosed in handsome metallic cases within building.

The Harris Fire Escapes.

Enclosed in handsome metallic case, installed under window, inside the building, ready for use.

To operate, open case and throw steel cable ladder out of window.

No disfigurement—rather, an ornament to a room. May be installed on baseboard, if desired.



A Fatal Descent.

The Old Rope Fire Escape.

Ninety-five per cent. of persons attempting to use Rope Escapes meet death by a FALL.

Ropes are either rotten, moth-eaten, or burn at first touch of flame.



The Old-Fashioned Balcony Fire Escape.

From Photograph taken in Greater New York.

Unsightly and unreliable. Expensive in construction and requires constant repairs.

Obstructed with ice, snow, boxes, barrels, when needed for use.

Disfigures the building; affords entrance for thieves.

The Harris "Automatic-Mechanical" Exterior Fire Escapes



PRICE-LIST of Harris "Automatic-Mechanical" Fire Escape

No. 1 Case and Mechanism for all lengths of Fire Escapes to 75 feet.....	\$50.00
No. 2 Case and Mechanism for all lengths of Fire Escapes from 75 feet to 100 feet.	75.00
No. 3 Case and Mechanism for all lengths of Fire Escapes from 100 feet to 125 feet.	100.00

To above add 50c. per foot for steel cable ladders
of length required.

Cost of installation extra.

Conduit system of concealed wiring if desired.

Estimates furnished on application, with scale
drawings for architects.

The Fire Escape is compactly rolled and concealed within a case with ornamental front corresponding to style of building and is "built in" underneath the cornice or in the gable. There is no visible suggestion of a Fire Escape—nothing whatever to mar the architectural beauty of the structure.

To the case is attached a wire cable running perpendicularly through interior of building to the basement, and which may be extended along ceiling as far as desired to the furnace, boiler-room, laundry or any point of greatest danger, with numerous fusible links exposed, which melt and separate at 160 degrees, thus automatically opening the door of the case containing Fire Escape (or the Fire Escape may be released by pulling the starting cord) simultaneously and loudly ringing the Fire Alarms, one located within the case and one on end of reel. The door of the case opens on its hinges to a slanting or inclined position, permitting Fire Escape to freely unwind at an angle sufficient to avoid any projections, balconies, awnings, etc., and momentarily checking descent of Escape when within 7 feet of ground (rendering impossible any accident to passers-by); then the door drops flatly against the building and the Fire Escape is made taut by a ratchet device attached to side of building or in pavement.



Instructions for Installing the Harris "Push-Button" Fire Escapes (Page 3)

Where this Escape is to be installed in new buildings, set the case or box directly underneath the window-sill at any distance below the sill desired, preferably midway between the baseboard and the window casement. Have the iron case set flush with the plastering line. When the building is finished, attach to the iron front or door a panel of wood (any ornamental design desired), by screwing the same to the iron front through openings provided for this purpose, cutting out sufficient of the wood panel to allow the push-button to come through to the front. By this method, and especially if the room is finished with panel or woodwork, the Escape can be so installed that those not informed would not mistrust from appearance that a Fire Escape or anything else was concealed behind the panel. Openings for push-button cases should be provided as follows:

For all lengths of Fire Escape up to 50 feet, opening should be $10\frac{1}{2}$ inches high, $8\frac{1}{2}$ inches deep, and $17\frac{1}{2}$ inches long.

For case containing from 50 to 75 feet of Fire Escape (heavy cables), opening should be $12\frac{3}{4}$ inches high, $10\frac{1}{2}$ inches deep, and $17\frac{1}{2}$ inches long.

For case containing 75 to 100 feet of Fire Escape (heavy cables), opening should be 17 inches high, 14 inches deep, and 18 inches long.

If thickness of the wall is not sufficient to take in the depth of case required, the projecting part of the iron case may be enclosed in wood, or the case may be allowed to project far enough to be converted into a handsome window seat, which can be made to materially improve the appearance of the room.

Instructions for Architects and Builders in Providing Openings for and Installing the Harris "Automatic-Mechanical" Fire Escapes (Page 6)

The most desirable location for the case containing the Fire Escape is under the cornice or in the gable, where there is sufficient room for a mechanic to install the appliance by working from the inside of the building. The appliance should preferably be placed so that when the Fire Escape is dropped it will come in front of a continuous line of windows from the top of the building to the street, as shown in cut of the Pennsylvania Grit Publishing Company Building. If the pilaster between two rows of windows does not exceed 24 inches in width, it is practicable to place the appliance so that the Fire Escape will come down directly in front of the pilaster, and it can then be reached from apartments on each side of this dividing line, as shown in cut of Commercial College Building. It is always preferable to place the case in such location that the starting cord, which extends from the case to the basement (with fusible connections and "pull" at each floor), will come down along a straight line of partitions or window casings, as it is not desirable to run this cord zigzag around windows or openings.

Where owners object to the pull cord showing in the rooms, the cord or wire can be placed in a conduit, concealed as

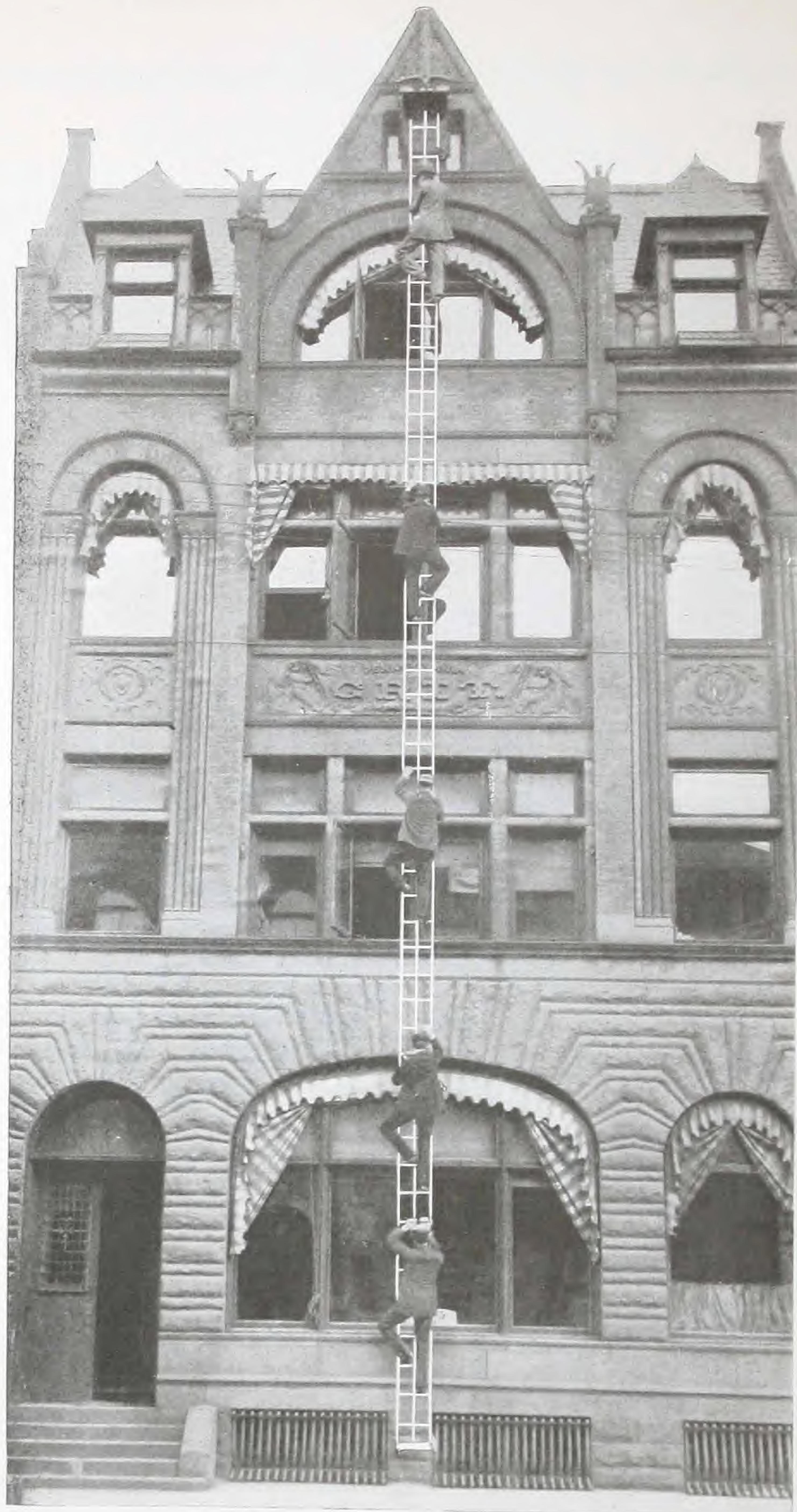
electric light and other wire, only exposing a plate and pull ring.

Size of opening for case containing from 25 to 75 feet of Fire Escape, $16\frac{1}{2}$ inches high (thickness of 6 ordinary bricks and their joints), 12 inches deep, and $24\frac{1}{2}$ inches long.

Size of opening for case containing 75 to 100 feet of Fire Escape, $19\frac{1}{2}$ inches high (thickness of 7 ordinary bricks and their joints), 14 inches deep, and $24\frac{1}{2}$ inches long.

Size of opening for case containing from 100 to 125 feet of Fire Escape, $22\frac{1}{2}$ inches high (thickness of 8 ordinary bricks and their joints), 15 inches deep, and $24\frac{1}{2}$ inches long.

It is desirable to place these cases in the walls as the building is being constructed, but if it is not practicable to do this they can be put in position from the interior of the building, the flange or ornamental exterior border being attached to the case after it is put through the opening. Where it is desirable to place these appliances in buildings already constructed, the entire work can be done from the interior of the building. Our drafting department will furnish scale drawings on application.



Pennsylvania Grit Publishing House, Williamsport, Pa., Equipped with the Harris System of "Automatic-Mechanical" Fire Escape and Harris Automatic Fire Alarms. The Illustration from Photograph Shows the Fire Escape in Actual Use.

TESTIMONIALS

NORWOOD HALL,
Fourth Ave. and Kingsley St.,
Travers & Trumpbour.
ASBURY PARK, N. J., July 31st, 1899.
HARRIS SAFETY COMPANY, St. James Bldg.,
New York.

GENTLEMEN:—Permit me to express my appreciation of the Harris Safety Fire Escape. I regard it as unequalled by any. My guests seem reassured by its presence, and we have secured many patrons through its instalment in our hotel. I deem it my privilege, as well as duty to the interest of human life, to recommend to the public the Harris Safety Fire Escape and System of Fire Alarms.

Hoping that others will find it as profitable an investment as myself, I am,

Very respectfully,

MARGARET E. TRUMBOUR,
for Travers & Trumpbour.

ATLANTIC CITY FIRE DEPT.

ATLANTIC CITY, N. J., May 3d, 1899.
HARRIS SAFETY COMPANY, St. James Bldg.,
New York.

GENTLEMEN:—Without hesitation I cheerfully state that your Portable Steel Ladder is the best fire escape that I have ever seen. Not only does it insure safe exit from a burning building, but it also furnishes a means of entrance for firemen

which no other escape can. It is certainly "built to save." Respectfully,
ISAAC WIESENTHAL,
Chief Engineer Atlantic City Fire Department.

LONG BRANCH FIRE DEPT.

LONG BRANCH, N. J., August 4th, 1899.
HARRIS SAFETY COMPANY, New York City.

GENTLEMEN:—Having witnessed a practical demonstration of your steel Portable Fire Escape and Harris Fire Alarms, I beg to say that in my judgment your system furnishes the most reliable means known for the protection of human life and property against the ravages of fire.

Yours truly,

THOS. L. SLOCUM, Chief,
L. B. F. Department.

AKRON, OHIO, FIRE DEPT.

AKRON, Ohio, June 17th, 1899.
HARRIS SAFETY COMPANY, New York City.
DEAR SIRS:—I have examined the Harris Portable Fire Escape, and find it the most simple, practicable, and durable Fire Escape I have ever seen.

There seems to be no reason why it should not last a lifetime. Yours respectfully,

B. F. MANDERBACH, Chief.

A Few of Many Approvals and Commendations

U. S. SENATOR DR. CHAUNCEY M. DEPEW.
NEW YORK, April 1st, 1899.

HARRIS SAFETY COMPANY, New York City.
GENTLEMEN:—I have had three of your Fire Escapes put on each floor in my house, and believe it the simplest and safest method yet invented. Yours truly,

CHAUNCEY M. DEPEW.

Office of the President.
CORNELL UNIVERSITY.

ITHACA, N. Y., February 2d, 1900.
To the HARRIS SAFETY COMPANY:

After examining the fire escape of the Harris Safety Company, I have ordered three for my residence, and I recommend that every lodging-house and every fraternity house in Ithaca, higher than two stories, be provided with at least one.

J. G. SCHURMAN.

HOTEL BRUNSWICK.

ASBURY PARK, N. J., July 20th, 1899.
HARRIS SAFETY COMPANY, New York City.

GENTLEMEN:—We have just received from the Building Inspector of our city his certificate that the Hotel Brunswick has complied with all the laws of the State of New Jersey respecting the equipment with fire escapes and safety appliances, by installing the Harris System of Fire Escapes and Harris Automatic Fire Alarms. We are confident that we have selected the best and most feasible fire escapes in existence.

Very respectfully yours,
MORGAN & PARSONS.

DEPARTMENT OF BUILDINGS.

NEW YORK, April 18th, 1901.
HARRIS SAFETY CO., St. James Building, The
City of New York.

GENTLEMEN:—The Board of Buildings at a meeting held April 17th, 1901, granted your application for official approval of the Harris System of Fire Escapes for use on all buildings less than four stories in height in The City of New York.

Respectfully,

A. J. JOHNSON,
Secretary, Board of Buildings

BUREAU OF FIRE ESCAPES, CITY OF PHILADELPHIA.

PHILADELPHIA, February 13th, 1902.
(Resolution.)

RESOLVED, That the Harris System of Steel Cable Fire Escapes be and hereby is approved for use on all buildings in the City of Philadelphia in lieu of the chain fire escape equipment required by law.

(Unanimously carried.)

DEPARTMENT OF BUILDINGS, CITY OF BUFFALO.

BUFFALO, N. Y., June 11th, 1901.
HARRIS SAFETY CO., St. James Building, New
York City, N. Y.

GENTLEMEN:—In reply to your letter of June 5th, I beg to say that the Harris System of Fire Escapes, to be used on buildings less than four stories in height in the City of Buffalo, has my official approval. Yours, etc.,
(Signed) F. T. REYNOLDS, Supt. of Buildings.



Building of the Williamsport, Pa., Commercial College, Showing the Harris "Automatic-Mechanical" Fire Escape in Less than Ten Seconds After Its Release by the Melting of the Fusible Link Exposed in the Boiler-Room in the Rear of the Building.

A Few of the Prominent Purchasers of the Harris System

Executive Mansion Washington, D. C.
Hon. W. B. Hornblower .. New York City.
Mr. Henry W. Poor..... New York City.
Mr. Stanford White..... New York City.
Hon. Chauncey M. Depew. New York City.
Mr. Russell Sage New York City.
Hon. Hugh J. Grant..... New York City.
Hon. Wm. R. Grace..... New York City.
Mr. John S. Huyler New York City.
Mr. Park Benjamin..... New York City.
Mr. Robert Fulton Cutting. New York City.
Mr. James McCreery New York City.
Mr. Fred C. Steinwav..... New York City.
Mr. Frank Presbrey New York City.
Mr. Robert A. Pinkerton.. New York City.
Mr. S. S. Auchincloss New York City.
Gen. Anson G. McCook .. New York City.
Mercantile National Bank. New York City.
Mr. Ogden Mills New York City.
Judge Edward Hogan New York City.
Mr. Peter Doelger New York City.
Hon. Frank S. Witherbee. New York City.
Mr. F. H. Macy, Jr..... New York City.
Mr. Harvey Edward Fisk. . New York City.
Mr. Wm. B. Dillon New York City.
Hon. E. E. Lauterbach... New York City.
Mr. Gould L. Hoyt New York City.
Mr. August Belmont New York City.
Mr. A. B. Claflin New York City.
Mrs. Daniel Morrison New York City.
Mr. Charles Thorley New York City.
Mr. Washington E. Connor.... N. Y. City.
Dr. Wm. Seward Webb... New York City.
Mr. Clarence H. Mackay. . New York City.
Hon. Henry A. Howland. New York City.
L. Marcotte & Co..... New York City.
Richard Deerves & Son.... New York City.
Mr. Wm. Allen Butler, Jr. New York City.
Rev. Dr. D. P. Morgan... New York City.
Mr. T. W. Ormiston New York City.
Mr. Pierrepont Edwards.. New York City.
Mr. James Stillman New York City.
Mr. R. Esterbrook New York City.
R. & L. Sutro New York City.
List & Lennon New York City.
George C. Flint & Co... . New York City.
Lewis & Conger..... New York City.
Mr. C. P. H. Gilbert..... New York City.
Mrs. John Claflin New York City.
Mr. Wallace B. Flint Brooklyn, N. Y.
Mr. C. A. Smylie Brooklyn, N. Y.
Mr. Thomas H. Bauckle.. Brooklyn, N. Y.
Dr. Charles Jewett Brooklyn, N. Y.
Hon. Silas B. Dutcher... Brooklyn, N. Y.
Mr. Julian D. Fairchild... Brooklyn, N. Y.
Hon. E. M. Grout Brooklyn, N. Y.
Mr. W. H. Baldwin Brooklyn, N. Y.
Cornell University Ithaca, N. Y.
Mr. Abbott S. Rogers Boston, Mass.
Mr. A. G. Fiske Boston, Mass.
Mr. C. M. Merriam Boston, Mass.
Mr. Lester Leland Boston, Mass.
Mr. F. M. Johnson Boston, Mass.
Waltham Watch Co..... Waltham, Mass.

Mr. S. M. Weld Dedham, Mass.
Mr. F. W. Peabody Beverly, Mass.
Mr. Edward A. Taft.. Buzzard's Bay, Mass.
Mr. Harold F. McCormick .. Chicago, Ill.
Mrs. Cyrus H. McCormick... Chicago, Ill.
Mrs. Emmons Blaine Chicago, Ill.
Mr. Leslie Carter Chicago, Ill.
Mr. W. S. McCrea Chicago, Ill.
Deering Harvester Company. Chicago, Ill.
Adams Express Company Chicago, Ill.
J. Kluefer Paper Box Co.... Chicago, Ill.
Mr. Charles H. Waeker..... Chicago, Ill.
Phoenix Horseshoe Co..... Joliet, Ill.
Mr. Herman Oelrichs Newport, R. I.
Mrs. Robert Goelet Newport, R. I.
Mr. W. K. Vanderbilt, Jr... Newport, R. I.
Mr. Gordon McKay Newport, R. I.
Mr. John R. Drexel Newport, R. I.
Mr. Elisha Dyer Newport, R. I.
Mrs. Geo. B. DeForest Newport, R. I.
Mr. Pembroke Jones Newport, R. I.
Oliver W. Huntington Newport, R. I.
Mr. Christian Devries Baltimore, Md.
Mr. I. L. Johnston..... Baltimore, Md.
Mr. Wm. C. Seddon Baltimore, Md.
Mr. Wm. E. P. Duval Baltimore, Md.
Mr. John Gill Baltimore, Md.
Mr. John A. Hambleton .. Baltimore, Md.
Hon. Thomas J. Shryock. . Baltimore, Md.
Mr. E. F. Abell Baltimore, Md.
Mr. Eugene Pence Butte, Mont.
Hon. Thomas Dolan Philadelphia, Pa.
Mr. August Thomas Philadelphia, Pa.
E. R. Hawkins & Co.... Philadelphia, Pa.
Mr. J. H. Converse Philadelphia, Pa.
Mr. H. A. Berwind Philadelphia, Pa.
Mr. Wm. Platt Pepper... Philadelphia, Pa.
James Strong & Co..... Philadelphia, Pa.
Mr. Francis L. Potts.... Philadelphia, Pa.
Mr. S. P. Witherill Philadelphia, Pa.
Mr. J. B. Blackwood.... Philadelphia, Pa.
Mr. P. F. Rothermel, Jr. Philadelphia, Pa.
Puritan Coke Co..... Pittsburg, Pa.
Mr. J. M. Dodge Germantown, Pa.
Hon. Levi P. Morton.... Rhinecliff, N. Y.
Mr. Geo. J. Gould Lakewood, N. J.
Mr. H. H. Rogers Fairhaven, Conn.
Mr. Clarence M. Hyde.. Greenwich, Conn.
Mr. J. C. Parish Southampton, L. I.
Mr. Geo. W. Childs Bay View, Mich.
American National Bank... Louisville, Ky.
Mr. G. T. Rogers Binghamton, N. Y.
Mr. F. S. Moody Burlingame, Cal.
Mr. Charles E. Bigelow.... Nordhoff, Cal.
Mr. Thomas Thacher ... Watch Hill, R. I.
Hon. Geo. C. Clausen .. Portchester, N. Y.
Mr. James McCrea Pittsburg, Pa.
Mr. W. D. Packard Warren, Ohio.
Mrs. Phoebe A. Hearst... Pleasanton, Cal.
J. J. McGrath Juneau, Alaska.
Fire Brigade Supply Co.... Napier, N. Z.
John Morris' Sons London, Eng.
Yale University New Haven, Conn.
The Athelston Club.. Battle Creek, Mich.

The Harris Combination Furniture Fire Escape is "*Built to Save.*"



Arm-Chair with Fire Escape concealed.

Push the article of furniture to window, uncover the Fire Escape and drop it out of the window. A strong grappling hook immediately engages the window sill and affords a positively safe anchorage for the Fire Escape, which is at once ready for rescue work. The grappling hook is self-adjusting to the height of any window sill. If desired, furniture will be made to match that now in use, or in almost any special design required, while our regular stock comprises furniture in modern and antique designs, and in styles and prices calculated to suit our patrons.

Estimates Furnished Upon Request.



The Harris Fire Escape as combined with furniture is constructed, as previously described, of three specially flexible steel wire cables, with steel rungs, copper or zinc plated. The Fire Escapes are compactly rolled and concealed within the furniture. There is no visible suggestion of the presence of a Fire Escape.

The upholstery, completely concealing the Fire Escape, can be readily released when emergency demands.



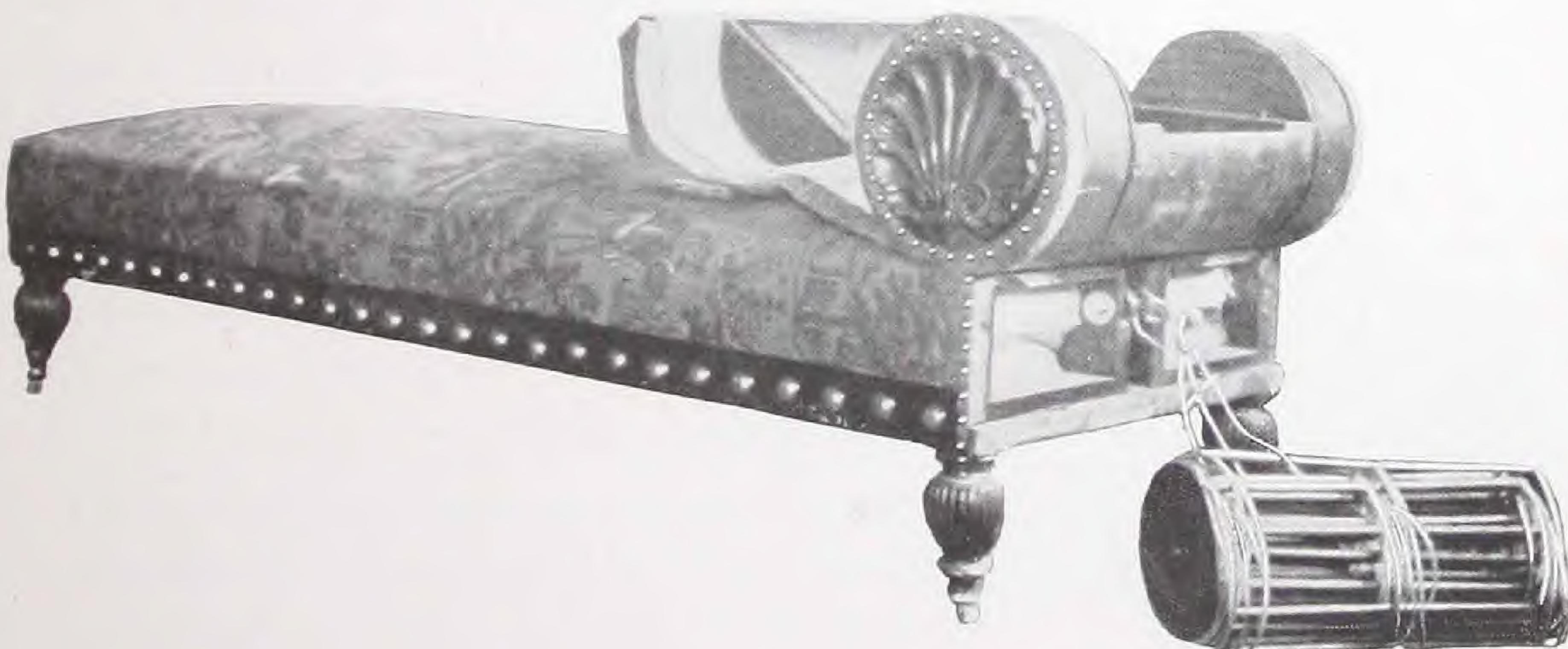
Harris Portable Fire Escape exposed in an Arm-Chair.



Normal appearance of Couch with Fire Escape concealed in the Head Rest.

THE HARRIS PORTABLE FIRE ESCAPE is applied in combination with ladies' writing desks, library and centre tables, music cabinets, divans, couches, and other articles of furniture of leading and late designs.

The furniture has proportionate outlines of dignity and refinement. The choicest materials and superb finish give to patterns a richness of design that suits for the best-furnished hotels, residences, offices, etc. Its practical application further gives to it a value not possessed by any other article of furniture.



One Style Couch with Fire Escape removed from Head Rest.

Estimates furnished upon request.

"Built to Save"

The
HARRIS—
System of

Automatic Fire Alarms

Ornamental
in Appearance.

Absolutely
Positive in Action.

No Possibility
of Getting Out of
Order if
Given No Attention
for a
Century.



THE HARRIS AUTOMATIC FIRE ALARMS consist of powerful best-grade bell-metal gongs designed expressly for the work proposed, the entire mechanism of which is released by the action of *dangerous heat* melting and parting a fusible link and automatically causing a continuous loud-sounding Fire Alarm to ring for fifteen minutes or until the mechanical motive power is exhausted.

The Harris Automatic Fire Alarms are of various sizes and encased in expensive or inexpensive brass or bronze ornamental cases, as desired, with or without standard Fahrenheit thermometer face or dial. These Alarms may be hung on the wall of any room, or be installed in dumb-waiters, elevators, air-shafts, etc. To these alarms may be attached wires running to basement or attic with fusible link connections on each floor, and no matter where the fire originates, they will instantly alarm the household.

The Harris Automatic Fire Alarms are not operated by electricity; do not depend upon uncertain mechanism for motive power; *they start with the fire and are never asleep, and at the critical moment will not allow any one to sleep.*

The Harris Automatic Fire Alarms Cover a Broad Field

Now in Use as Enumerated Below

Private Residences

These Fire Alarms are indispensable in every private residence. So say our patrons.

Commercial Buildings

They are invaluable for placing in all classes of commercial buildings, in elevator shafts, and around corridors, and in apartment houses.

Apartments

One of these alarms hung over the entrance or in your apartment will give alarm long before the fire reaches such apartment.

Hotels

In hotels, if placed in hallways and throughout the building, notice of the presence of fire is given immediately.

Factory Buildings

In factory buildings, when placed in the boiler room and a few throughout the building where fires are likely to occur, they will render more accurate service and give a decidedly quicker alarm than a dozen watchmen.

Warehouses

In warehouses, where fires so often occur from spontaneous combustion, these Alarms locate the fire instantly, and give the necessary warning.

Ocean Steamers

Their use becomes an absolute necessity in the holds of all vessels used for transporting merchandise, as it is a well-known fact that in all large ocean vessels fire is frequently started by the overheating of coal bunkers or spontaneous combustion among the varied cargoes. This is especially noticeable in shipments of cotton.

War Vessels

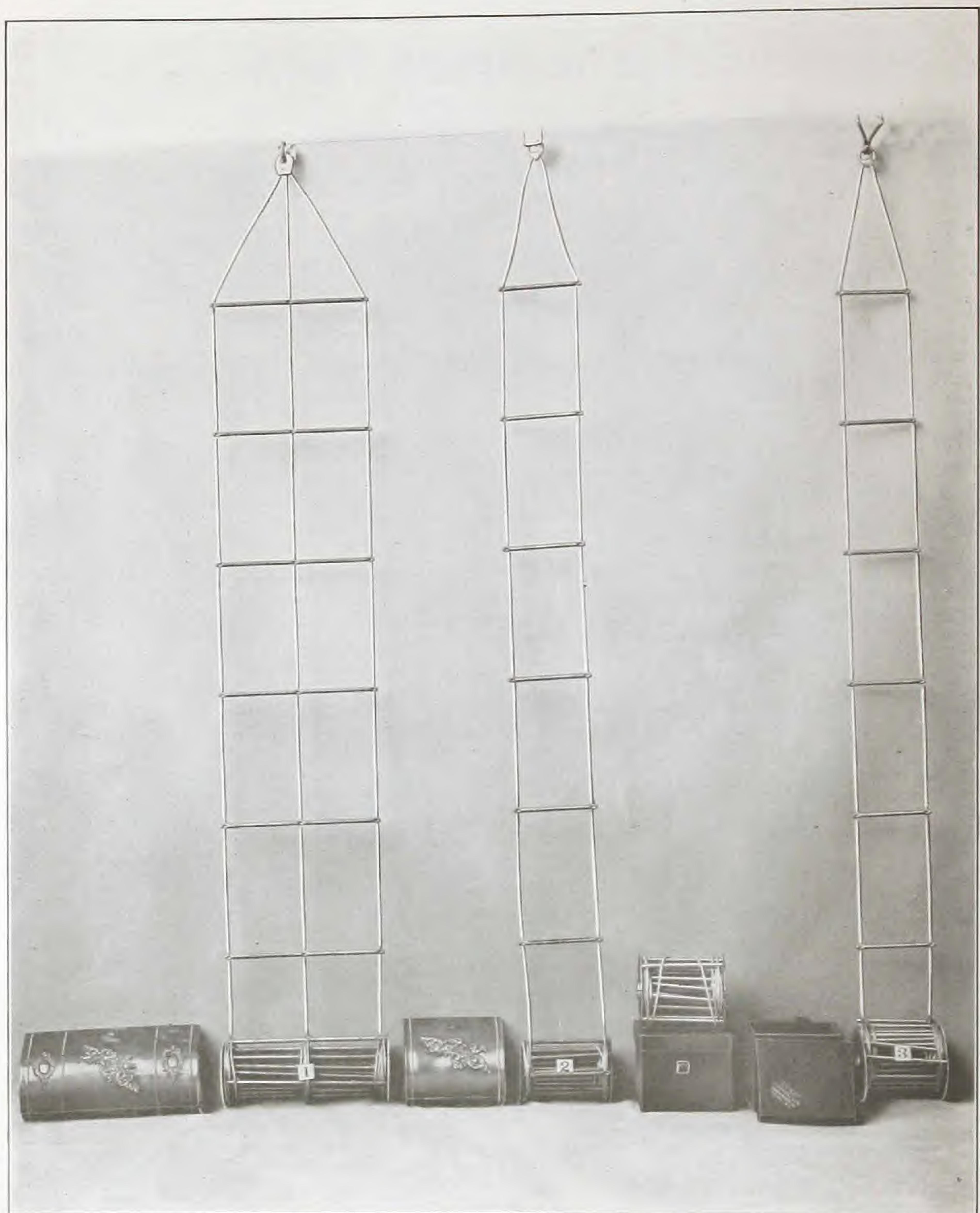
In the war vessels throughout the world constant watch must be kept and record made of the temperature in magazines and coal bunkers, and even with this precaution fires often occur on these vessels. With the Harris Automatic Fire Alarms installed, notice is immediately given of the overheating of these compartments. The United States Government is now using them on war vessels and transports.

AUTOMATIC FIRE ALARM

Purely mechanical. Not operated by electricity. Wired to any part of building. Links fuse at 160° Fahrenheit.

Style.	Price.
"A" 5-inch Fire Alarm, protected by metallic case.....	\$10.00
"A-1" 5-inch Fire Alarm, with oxidized open-work metallic case, Fahrenheit standard thermometer or dial face..	15.00
"B" 8-inch Fire Alarm, protected by metallic case.....	15.00
"B-1" 8-inch Fire Alarm, protected by metallic case, with wire and fusible link connections (cost of wiring extra)	15.00
"B-2" 8-inch Fire Alarm, with oxidized ornamental open-work metallic case, Fahrenheit standard thermometer or dial face.....	25.00
"B-3" 8-inch Fire Alarm, with oxidized ornamental open-work metallic case, Fahrenheit standard thermometer or dial face, wire and fusible link connections (cost of wiring extra)....	25.00
"C" 8-inch Fire Alarm, shieve attachment, protected by metallic case, with wire and fusible link connections (cost of wiring extra)	25.00
"D" 8-inch Fire Alarm, plain, without cover, with 50 feet of wire, fusible links, angles and anchorage. For Factories, Stores or Warehouses	10.00

On receipt of specifications estimates will be promptly furnished.



1. **HARRIS "STANDARD."** (Case at left). For prices see page 2. White Enamored Case, \$2.00 extra.
2. **HARRIS "SPECIAL."** (Case at left). Prices are one-half that of "Standard." White Enameled Case, \$1.00 extra.
3. **HARRIS "TOURIST."** 50 feet long. Tested 1,200 lbs. Beautifully nickelated. Weight, 10 lbs. Enclosed in Handsome Black Leather Case, 8 x 8 x 8 inches. Price, \$20.00.



1 2



3 4

EXHIBITION HARRIS SAFETY EXTINGUISHERS

House, 14 ft. x 16 ft.—26 ft. high—Material, Dry Pine. Contents—2 bbls. Shavings, $\frac{1}{4}$ cord Pine Edgings, $\frac{1}{2}$ bbl. Pine Tar, 10 gal. Coal Oil, 10 gal. Gasoline. Heat perceptible at 200 ft. Extinguished in 30 seconds by HARRIS SAFETY NO. 3.

Beware! Danger Ahead!

Agents of carelessness are ever waving the red flag of danger and courting destruction of the innocent. Imperative duty demands the attention of every home-loving father, conservative business man, and public official to surround family, employees or the lives of those intrusted to their care with the most efficient safeguards against the possibilities of destructive fires.

There never was a conflagration, however destructive, but that it could have been extinguished by a "*Harris Safety*" Fire Extinguisher.

Public sentiment and new laws of recent enactment require the instalment of effective fire extinguishers in all public buildings, hotels, factories, etc., or where persons are congregated. The fact that a building is fire-proof is not a guaranty that it will not be visited by fires. The total destruction of such buildings is not infrequent.



A Reliable "*Harris Safety*" is a Trusty Servant.

Each Extinguisher is fully guaranteed. The chemicals used shut off the supply of oxygen and smother the fire instantly. It is charged, but has no pressure. Strong—, made of No. 17 gauge (Stubs) seamless brass tubing, and nickel-plated. Tested to 450 pounds. Can't get out of order because of neglect. No rubber hose to rot or crack and render it inoperative. It can be recharged quickly without trouble and at little expense, throwing a stream a distance of fifty feet.

The acid is contained in hermetically sealed blown glass bottles.

It is "as perfect as perfect can be."

Equip with the "*Harris Safety*" and run your own fire department.

If you pay an insurance premium you must expect that a fire is not improbable. Equip with the "*Harris Safety*" and prevent fire.

The "*Harris Safety*" loses none of its virtues or vitality through non-use. It is always ready.

It has no stopcocks or faucets to corrode and become inoperative or hard to open.

It will reach confined spaces where water will not.

It *smothers* fire, whereas water only suppresses that portion with which it comes in contact.

It discharges with great force.

It is very light and easily handled.

It is *simple, safe, and effective*.

It **never fails to put out the fire.**



The Scientific "HARRIS SAFETY" Extinguisher

Pronounced by Scientific Authority the only Extinguisher Producing
PERFECT CHEMICAL ACTION.

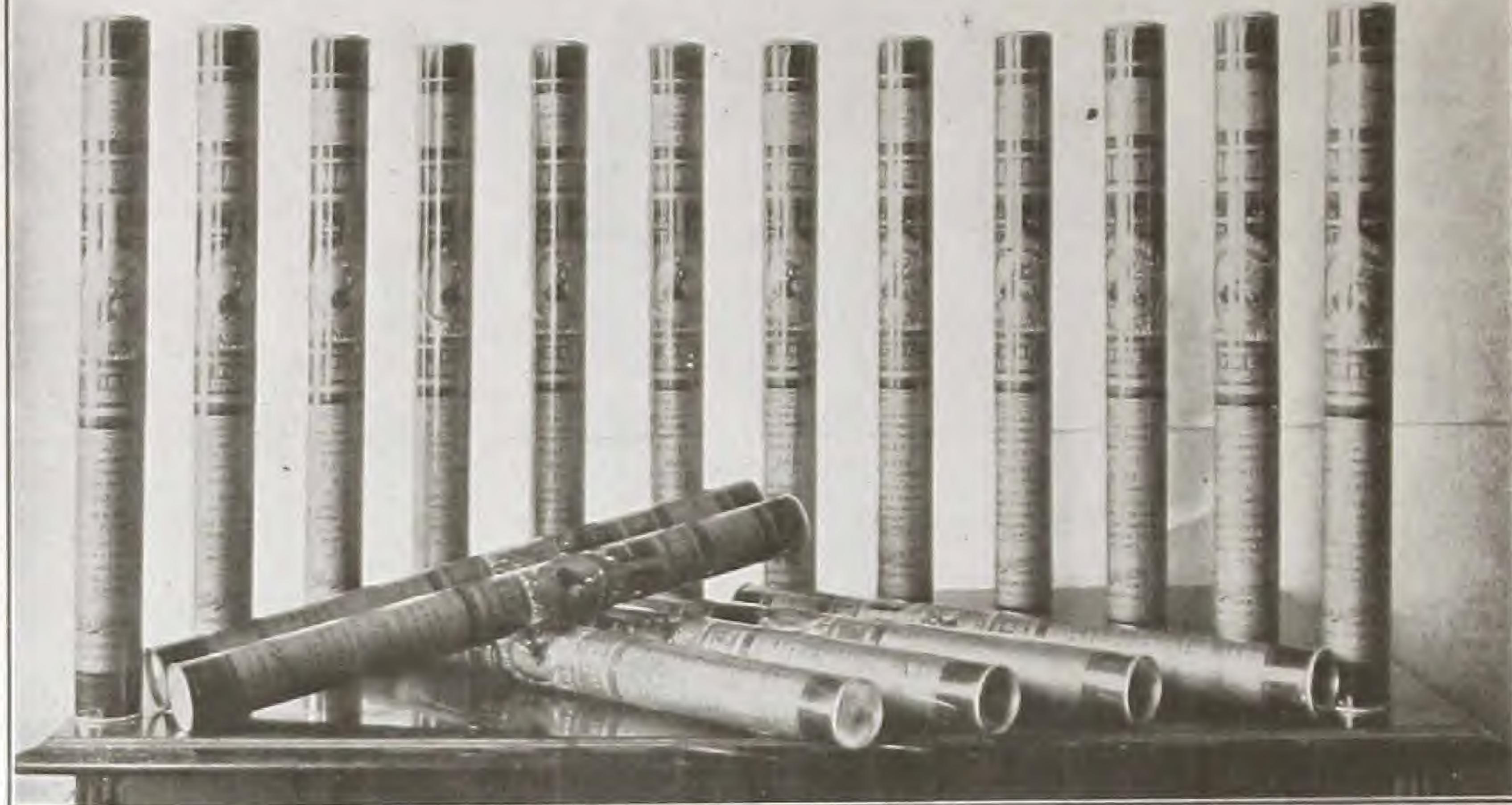
Manufactured from Seamless Brass Tubing. Beautifully Nickled. Bursting impossible.
Sulphuric Acid in hermetically sealed glass tube. Tested to 450 lbs. to square inch.

No. 1.—For Staterooms, Street Cars and Private Dwellings.....	\$8 50
No. 2.—For Institutions and General Commercial use	10 50
No. 3.—For Public Buildings, Hose Carts and Steamships.....	25 00
Discount in quantities.	

Among our many valued patrons we mention :

Mr. Park Benjamin.....	New York City.
Hon. John G. Schurman.....	Ithaca, N. Y.
Mr. W. K. Vanderbilt, Jr.....	Newport, R. I.
Hon. Thomas J. Shryock.....	Baltimore, Md.
Hon. Thomas Dolan.....	Philadelphia, Pa.
Mr. H. A. Berwind.....	Philadelphia, Pa.
Hon. Levi P. Morton.....	Rhinecliff-on-Hudson, N. Y.
Mr. H. H. Rogers.....	Fairhaven, Conn.
Hon. A. B. Colvin.....	Glens Falls, N. Y.
Harris, Henry & Cahan.....	Halifax, N. S.
Mr. R. C. Clowry.....	Lake Geneva, Wis.
Hon. Geo. E. Green.....	Binghamton, N. Y.
Binghamton Street Railway Co.....	Binghamton, N. Y.
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Government Printing House.....	Washington, D. C.
Army and Navy Club.....	Washington, D. C.
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Seaboard Air Line.....	Norfolk, Va.
Clyde Line of Steamers.....	New York City.
Old Dominion Steamship Co.....	New York City.
Joy Steamship Co.....	New York City.
Poland Spring House.....	Poland Springs, Me.
Empire Theatre Building.....	Glens Falls, N. Y.
Briarcliff Lodge	Briarcliff Manor, N. Y.
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Mrs. Herbert Parsons.....	New York City.
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Miss A. H. Lusk	New York City.
I. B. Kleinert Rubber Co.....	College Point, L. I., N. Y.
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Mrs. Matthew Semple.....	Philadelphia, Pa.
Standard Telephone and Telegraph Company,	Philadelphia, Pa.
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Composite Board Co	Fulton, N. Y.
J. Hood Wright Memorial Hospital, New York City.	
Fonda, Johnstown and Gloversville R.R.,	Gloversville, N. Y.
Young Ladies' Home	New York City.
Fox Memorial Hospital.....	Oneonta, N. Y.
John M. Mack.....	Philadelphia, Pa.
New York Athletic Club	New York City
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Mr. Harry B. Mulliken.....	New York City.
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Mr. E. K. Rossiter.....	Washington, Conn.
Mr. John G. Gibson.....	Atlantic City, N. J.
Dr. R. H. Derby.....	Dark Harbor, Me.
Trinity Church Corporation.....	New York City.
Hotel Agnew	Atlantic City, N. J.
Mr. James M. Mack	Philadelphia, Pa.
Tams, Lemoine & Crane.....	New York City.
Hudson Valley Railway Co.....	Glens Falls, N. Y.
Mrs. Hermann Oelrichs.....	Newport, R. I.
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Dr. Frank W. Brandow	Pittsfield, Mass.
Winton Motor Carriage Company ..	New York City.
Lewis & Conger	New York City.
Frank Presbrey	New York City.
Mr. George McNeir	New York City.



"Pan American" Dry Chemical Fire Extinguisher

Most Powerful Dry Chemical Extinguisher Manufactured.

Generates Gas to 100,000. Its Dry Chemical Displacement Cannot Explode or Freeze. Harmless to Person or Property. Especially Adapted for Dwellings and Sleeping Apartments. Powerfully Efficient for Electrical Fires. Already in use by the Great Electric Street Car lines throughout the World.

BEWARE OF WORTHLESS IMITATIONS.

Handsomely Decorated Metallic Tube $22\frac{1}{8} \times 2\frac{1}{8}$. Price \$3 Each. Discount in Quantities.

THE NIAGARA, ST. CATHARINES & TORONTO RAILWAY CO.
Office of General Manager.

ST. CATHARINES, Ont., October 30th, 1901.

HARRIS SAFETY CO., St. James Bldg., 26th St. & Broadway, New York, N. Y.

GENTLEMEN:—I take pleasure in assuring you of our entire satisfaction with your "Pan-American Dry Powder Fire Extinguisher." Early in the season we ordered a supply of these and put two in each of our big suburban cars and on several occasions their efficiency was demonstrated.

I have recently placed a second order and believe this is the best recommendation I can give.

Yours very truly,
NIAGARA, ST. CATHARINES & TORONTO RAILWAY CO. Per E. F. Seixas, Gen'l Mgr.

JOS. LAURER BREWING CO.
BINGHAMTON, N. Y., November 2d, 1901.

HARRIS SAFETY CO., 26th St. and Broadway, New York.

GENTLEMEN:—Replying to your inquiry concerning the efficiency of your Dry Powder Fire Extinguisher as used in our plant, we must say we are highly pleased with it, and cheerfully recommend its use to the trade.

Very respectfully yours,
JOS. LAURER BREWING CO.

STAR LAUNDRY CO.
MINNEAPOLIS, Minn., November 4th, 1901.
MESSRS. HARRIS SAFETY CO., St. James Bldg., 26th St. and Broadway, New York, N. Y.

GENTLEMEN:—Thinking perhaps you might like to hear a word respecting the Pan-American Fire Extinguishers with which my building was equipped a short time since, I write to say that recently, while seated in my office after the plant was shut down for the day, I smelled smoke, and upon investigation found that fire by a spark from the boiler had communicated to the fuel room in the basement, and when I got there

found I had arrived none too soon, as fire was eating its way into edgings stored in the basement; but by a quick application of the Pan-American Fire Extinguisher soon had the fire out, and to any wanting a quick and effective fire extinguisher I can, from experience, recommend the Pan-American.

Yours truly, STAR LAUNDRY CO.
J. N. Button, Pres.

THE ANDREWS-BY-THE-SEA.
Holland's, Rockaway Beach.
LONG ISLAND, November 16, 1901.

HARRIS SAFETY CO., New York City.
GENTLEMEN:—I have lately equipped the "Andrews-by-the-Sea" with your Pan-American Dry Chemical Fire Extinguisher, which is sufficient evidence that I consider it the best on the market. Having witnessed several demonstrations with actual fire, I can really say that it is a marvel as a fire killer, and I recommend it for use in all buildings, especially hotels where valuable carpets and tapestries would be ruined by the use of a liquid fire extinguisher.

Respectfully, F. B. ANDREWS.

BINGHAMTON RAILROAD COMPANY.
BINGHAMTON, N. Y., November 1st, 1901.
F. J. BYRANT, Gen'l Mgr., HARRIS SAFETY CO., St. James Bldg., New York.

DEAR SIR:—We have recently equipped our car houses and power station with the "Pan-American" extinguisher, manufactured by your company. While we have had no opportunity to make a practical demonstration of their value, we are satisfied from tests we have seen made and from our knowledge of the excellent quality of the extinguisher that they are an important and valuable addition to our equipment for protection against fire. I cannot see how street railway companies in particular can afford to be without them. Yours respectfully,

J. P. E. CLARK, Gen'l Mgr.

THOUSANDS OF OTHERS.



"ACME." Extra Heavy Construction.

Approved by National Protective Association.

**Built on Specifications of the
NATIONAL BOARD OF UNDERWRITERS.**

Extra Heavy Copper. **Extra Brazed and Riveted.**
Extra Heavy Lead Lined. **Extra Heavy Rubber Hose.**

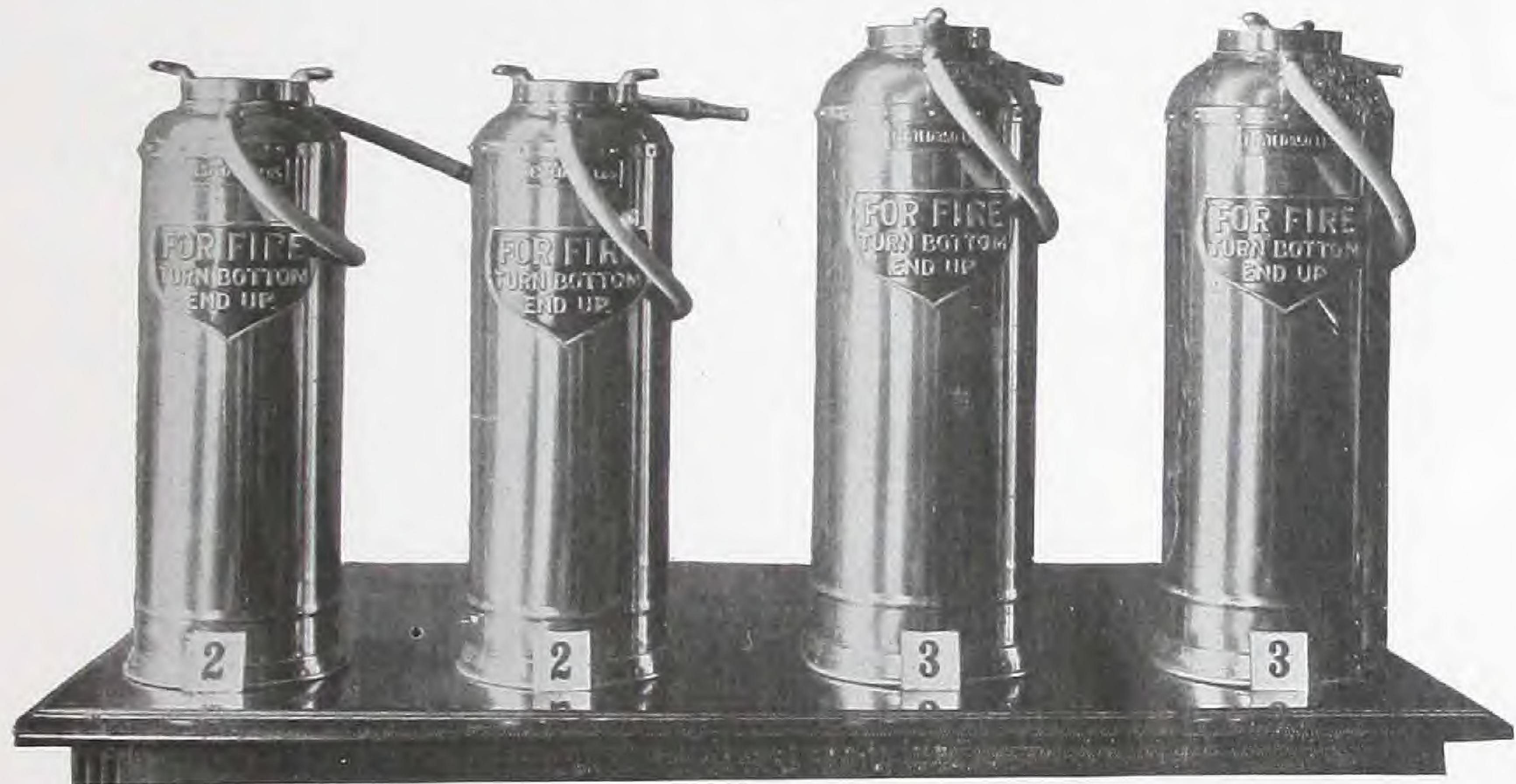
Tested to 450 pounds. Weight, unfilled, 18 pounds.

Capacity, 3 Full Liquid Gallons.

This Extinguisher recently put on the market combines all the good qualities of competing machines and adds many especially new features. Its extra heavy construction makes it particularly durable and proof against accident or rough usage. Comparison with other makes will immediately show its superiority.

Price in burnished copper each, \$15.00
" heavy nickel, " 16.50

DISCOUNT IN QUANTITIES.



The “Harris Tip Over” Extinguisher.

Safe, Simple, Effective, Durable.

Constructed of Cold-Rolled Copper. Tested to 35° pounds.

No. 2 Size, 2 gallon capacity (copper).....	\$9.00
" 2 " 2 " (nickel).....	10.50
" 3 " 3 " (copper).....	10.50
" 3 " 3 " (nickel).....	12.00
" 5 " 5 " (copper).....	15.00
" 5 " 5 " (nickel).....	18.00

DISCOUNT IN QUANTITIES.

HARRIS SAFETY “AUTO” FIRE EXTINGUISHER

SPECIALLY BUILT
BEAUTIFULLY NICKELED

18 INCHES HIGH
2½ INCHES DIAMETER

THROWS STREAM 30 FEET
SAVES YOUR MACHINE
SAVES YOU INJURIES
THE ONLY EXTINGUISHER
FOR AUTOMOBILES
ENDORSED BY LEADING
CHAFFEURS

CATALOGUE FREE

HARRIS SAFETY CO.

St. James Building, New York
Telephone, 513 Madison

“AUTO” FIRE EXTINGUISHER.

Directions for Charging. Fill Extinguisher to within three inches of top with water in which one package (4 oz.) of bi-carbonate of soda has been thoroughly dissolved and solution left standing fifteen minutes. Place small rubber ring around centre of sulphuric acid bottle (1½ oz.). Arrange handle perpendicular, with bottle holder free, then crowd acid bottle down into holder so that rubber ring will hold bottle tight. Place nipple on end of nozzle after which insert discharge tube and screw down top firmly with rubber washer in place using thumb piece but not nozzle which may be broken. Handle acid bottle carefully as its contents will burn hands or fabric. Complete operation by hooking check-chain in thumb piece and wiping Extinguisher dry. Follow directions carefully in the order given.

To Place Extinguisher in Vehicle. Place holder in desired position against front or back of seat or outside of carriage. Screw down or bolt, using thin wood to support material of the carriage. Block up if necessary under bottom of holder and secure top either by screw or metal band to nearest support. Place felt disc cushion at the bottom, inside the holder. Draw felt cushion over bottom of Extinguisher and crowd into place with nozzle directed out of vehicle.

To Discharge Extinguisher. To discharge, draw Extinguisher from holder, unhook check-chain and turn handle until the stream appears. Direct chemical on and around the flame, beginning at the bottom. After using Extinguisher rinse thoroughly, remove all broken glass and after thoroughly drying, re-charge as above directed. Reasonable care should be given holder and felt cushions. If wet from exposure, remove Extinguisher and cushion, thoroughly dry and return. The entire apparatus should be kept dry and polished bright. Extra cushions, holders, or other parts furnished if desired.





Published by the Press Publishing Company, 52 to 63 PARK ROW.
New York

AUTO AFLAME DEFIED FIRE DEPARTMENT.

Chemical Engine Was at Last
Sent for and Put Out
the Blaze.

Automobile fires are the latest. One started last night in a big gasolene machine on Third street, Brooklyn; put the water engines out of business and was subdued only after a chemical engine had arrived to enter the fight and after the neighborhood had been panic-stricken.

Charles Miller, of No. 385 Third street, and his brother-in-law, both of whom are employed by an automobile company, drive up in the machine to take their families for a ride. As Miller dismounted, he noticed that the gasolene tank had sprung a leak and the fuel was burning in a small flame. He tried to slap it out with his hands but the flame grew larger.

Miller knows the explosive nature of gasolene and calling to his brother-in-law, they fled into the house. The flame increased quickly until the whole block was brilliantly lighted. Policeman Landler, of the Fifth Avenue Station thought boys had started a bon-fire and came up on the double-quick. When he saw what was the matter he sent in a fire alarm.

Many people who were on the piazzas of their homes nearby became terrified and fled within. The noise of the fire engines hastening to the scene drew a big crowd. The police reserves were called out to keep the people a safe distance from the blazing auto.

Streams were turned on the auto, but the gasolene flowed in blazing rivulets on top of the water and threatened to set other fires, so the engine companies turned off the water and sent in a hurry call for a chemical engine. An explosion of gasolene was expected any minute and every one kept at a safe distance. The chemical engine finally put out the flames and the neighborhood breathed easily again. The auto was a wreck.

An Automobile Fire

is perhaps the most stubborn and aggravating blaze conceivable. Being a gaseous flame it can only be conquered by gas.

The Harris

AUTO - FIRE Extinguisher

(See Opposite Page)

Is especially constructed to do this work.

Compact and Powerful.

Easily Operated.

Not affected by the jolt of the carriage.

It is always ready for service.

Height, 18 inches.

Diameter, 3½ inches.

Built of Seamless Brass Tube, beautifully nickeled, Acid in sealed glass tube. Can be recharged instantly. The only especially constructed extinguisher for Automobiles.

Three full chemical charges free with each extinguisher.

Net Prices, F.O.B., New York.

Regulation Nickel Plated "Auto".....	\$10.00
Special Burnished Brass.....	10.50
Special Enameled, Red, White or Black,	11.50
Oxidized Copper and Nickel.....	11.50
Finished Brass or Nickel Holder, with full set cushions.....	3.50
Rubber water-proof hood covering.....	2.00

SAMPLES SUBMITTED BY EXPRESS OR BY SALESMAN.



	EACH
A "Pan American" dry powder Fire Extinguisher.....	\$3 00
AA "Yacht and Auto," dry powder, large tube, finished brass, nickel or leather covered; especially adapted for Yachts, Parlor Cars and Automobiles.....	6 50
B "Acme" heavy, 3-gal. Tip-over Liquid Extinguisher, copper.....	15 00
BB "Acme" heavy, 3-gal. Tip-over Liquid Extinguisher, heavily nickeled	16 50
C Harris Tip-over, 2-gal. Extinguisher, copper	9 00
CC Harris Tip-over, 2-gal. Extinguisher, nickel-plated.....	10 50
D Harris Tip-over, 3-gal. Extinguisher, copper	10 50
DD Harris Tip-over, 3-gal. Extinguisher, nickel-plated.....	12 00
E Harris Tip-over, 5-gal. Extinguisher, copper	15 00
EE Harris Tip-over, 5-gal. Extinguisher, copper	18 00

Three complete chemical charges with each Extinguisher.

Discount in quantities.

We manufacture the largest line of Fire Extinguishers in America.

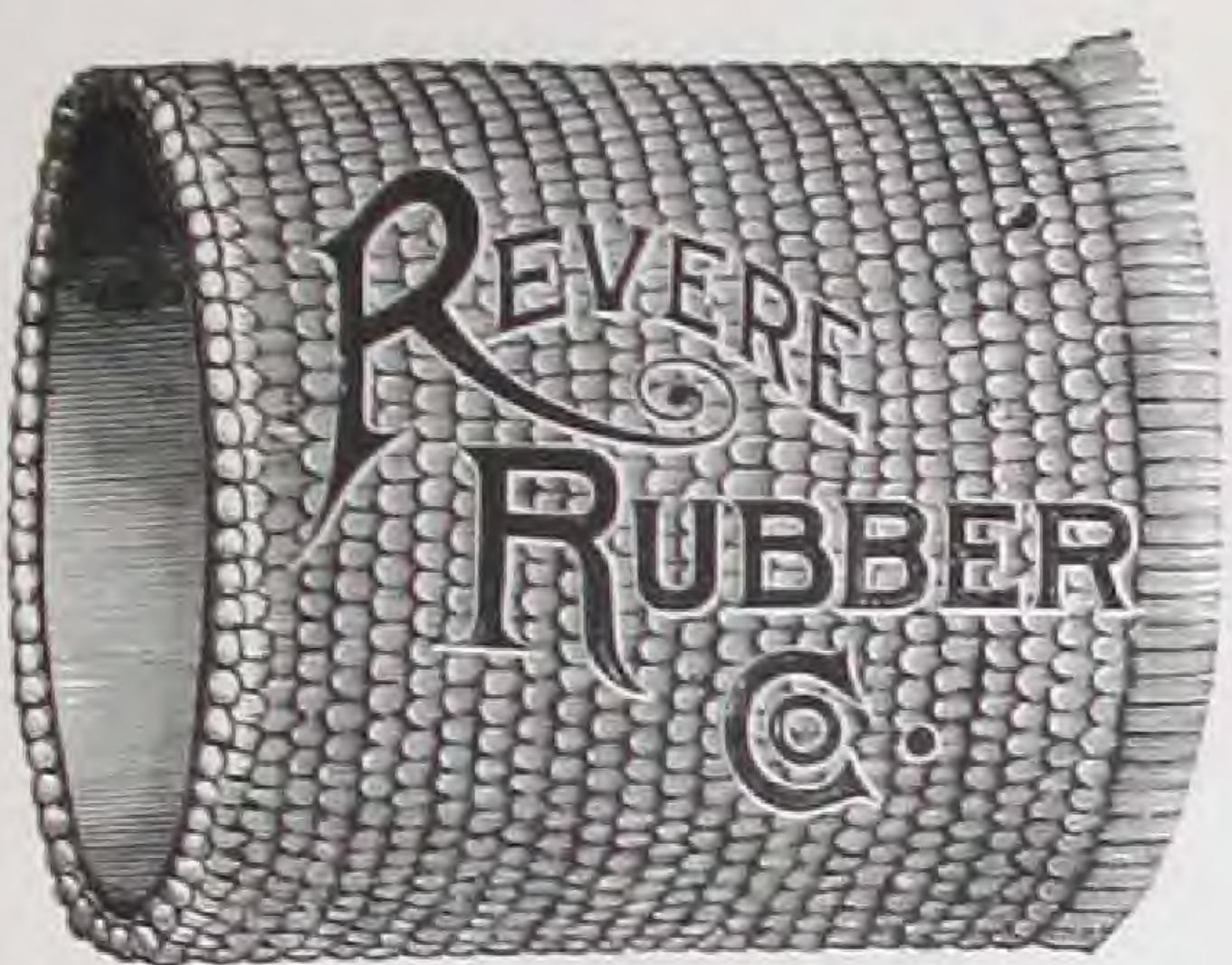
Over Twenty Styles and Sizes.

Our extensive stock enables us to make shipments in any quantity upon short notice.

All Extinguishers are thoroughly tested before leaving our factory and fully guaranteed as to safety and efficiency.

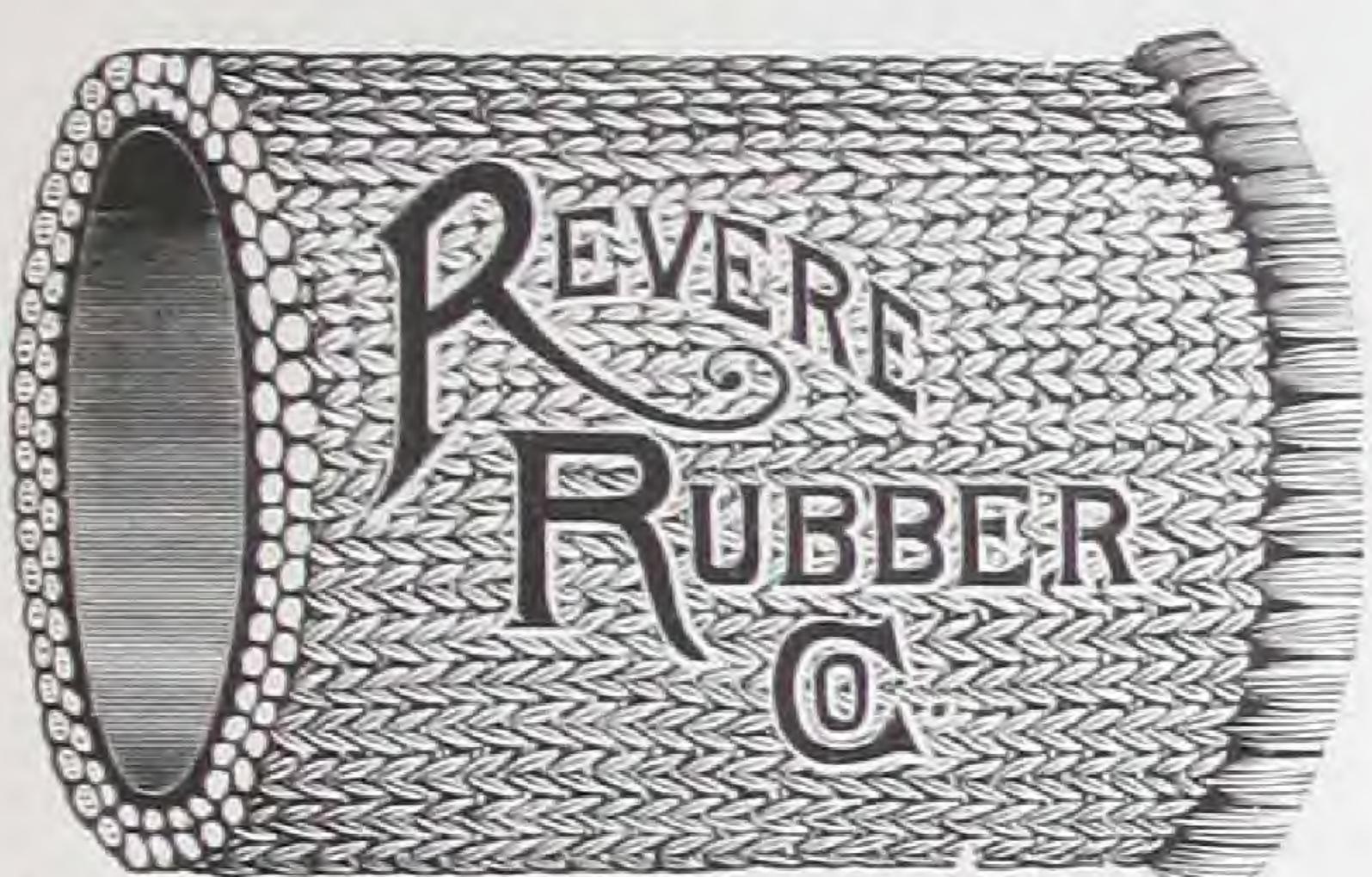
Extra Chemical Charges furnished at reasonable cost. Charges for all extinguishers can be obtained at any drug store.

We solicit your business.



Underwriters' Rubber Lined Hose

"Security"— $2\frac{5}{8}$ in. approved..... 75c.



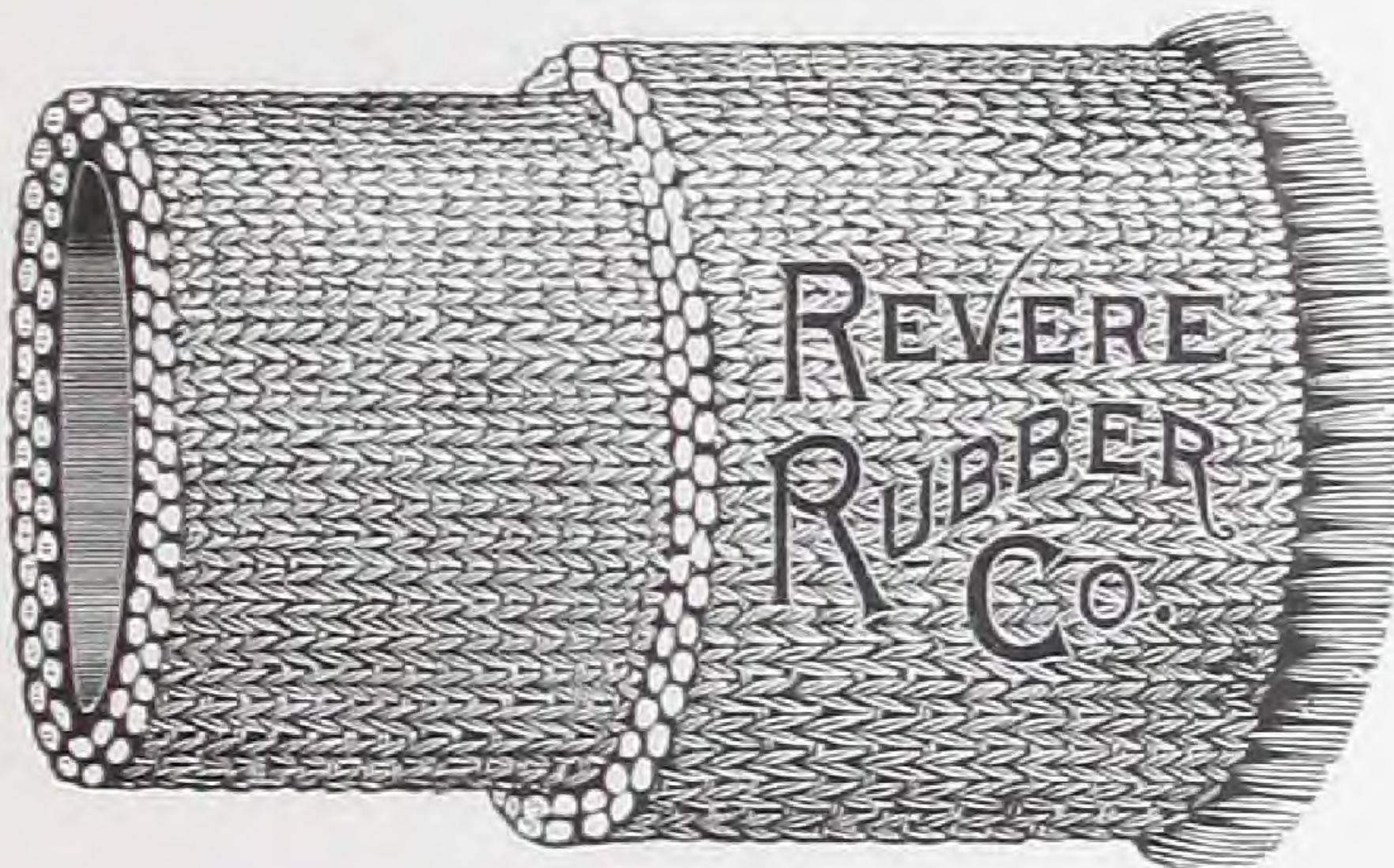
Rubber Lined Single Jacket Fire Hose

"Bulls' Eye"— $2\frac{1}{2}$ in. per foot..... 80c.

"Little Giant"— $2\frac{1}{2}$ in. per foot..... 70c.

"Burro"— $2\frac{1}{2}$ in. per foot..... 60c.

"Gingo"— $2\frac{1}{2}$ in. per foot..... 50c.



Rubber Lined Double Jacket Fire Hose

"Mastiff"— $2\frac{1}{2}$ in. per foot... \$1.00

"Beacon"— $2\frac{1}{2}$ " " " .. 1.00

"Ulyssis"— $2\frac{1}{2}$ " " " .. 1.00



Underwriters' Linen

S SS SSS

$1\frac{1}{4}$ -30. 1 -20. 1 -15.

$1\frac{1}{2}$ -33. $1\frac{1}{4}$ -22. $1\frac{1}{4}$ -18.

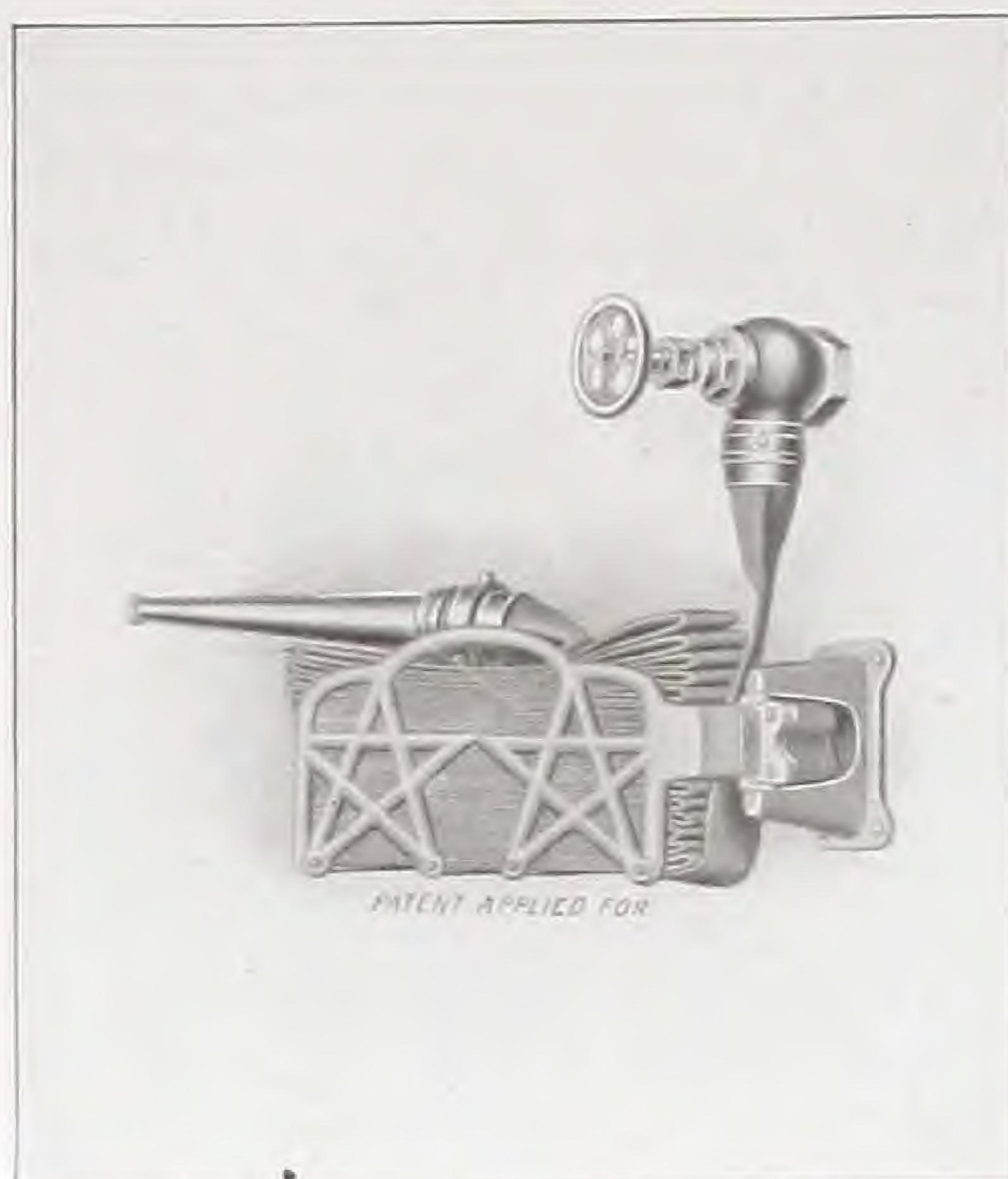
2 -42. $1\frac{1}{2}$ -25. $1\frac{1}{2}$ -20.

$2\frac{1}{2}$ -50. 2 -30. 2 -24.

$2\frac{1}{2}$ -35. $2\frac{1}{2}$ -28.

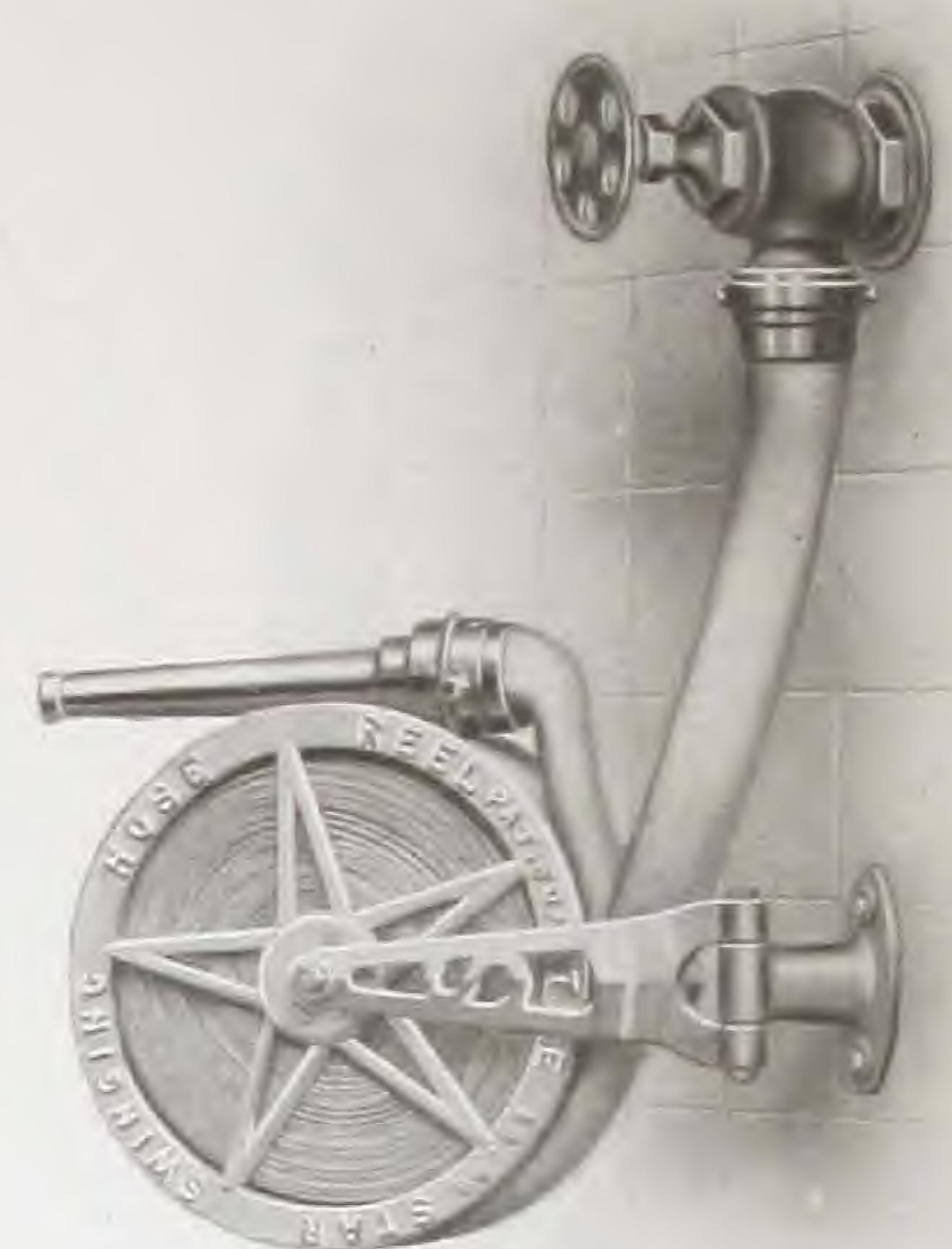
ALL HOSE FULLY GUARANTEED.

SEND FOR SAMPLES, ESTIMATES AND DISCOUNTS FROM ABOVE LIST.



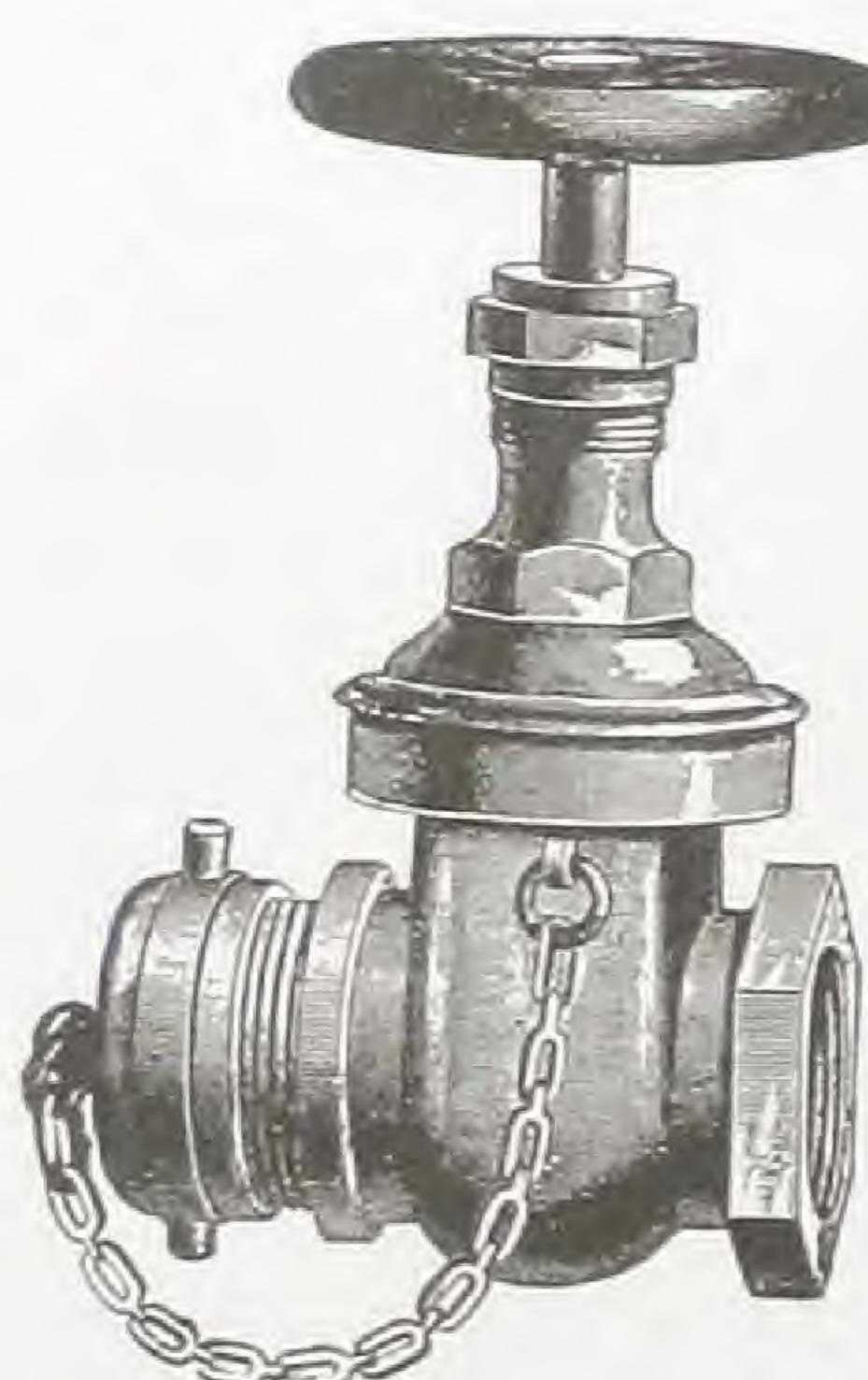
Star Swinging Hose Racks.

1	1½ Plain Linen Hose.....	\$5 00
2	25 ft. 2 " " "	5 00
3	2½ " " "	5 00
4	1½ " " "	5 50
5	50 ft. 2 " " "	5 50
6	2½ " " "	5 50
7	1½ " " "	5 50
8	75 ft. 2 " " "	5 50
9	2½ " " "	5 50
10	1½ " " "	5 50
11	100 ft. 2 " " "	6 00
12	2½ " " "	6 00
Last three numbers for 50 feet 2½ Mill Hose....		6 00



Star Swinging Hose Reels.

1	1¼ or 1½ Plain Linen Hose.....	\$5 50
2	25 ft. 2 " " "	5 50
3	2½ " " "	5 50
4	1½ " " "	5 50
5	50 ft. 2 " " "	5 50
6	2½ " " "	5 50
7	1½ " " "	6 50
8	75 ft. 2 " " "	6 50
9	2½ " " "	6 50
10	1½ " " "	7 00
11	100 ft. 2 " " "	7 00
12	2½ " " "	7 00

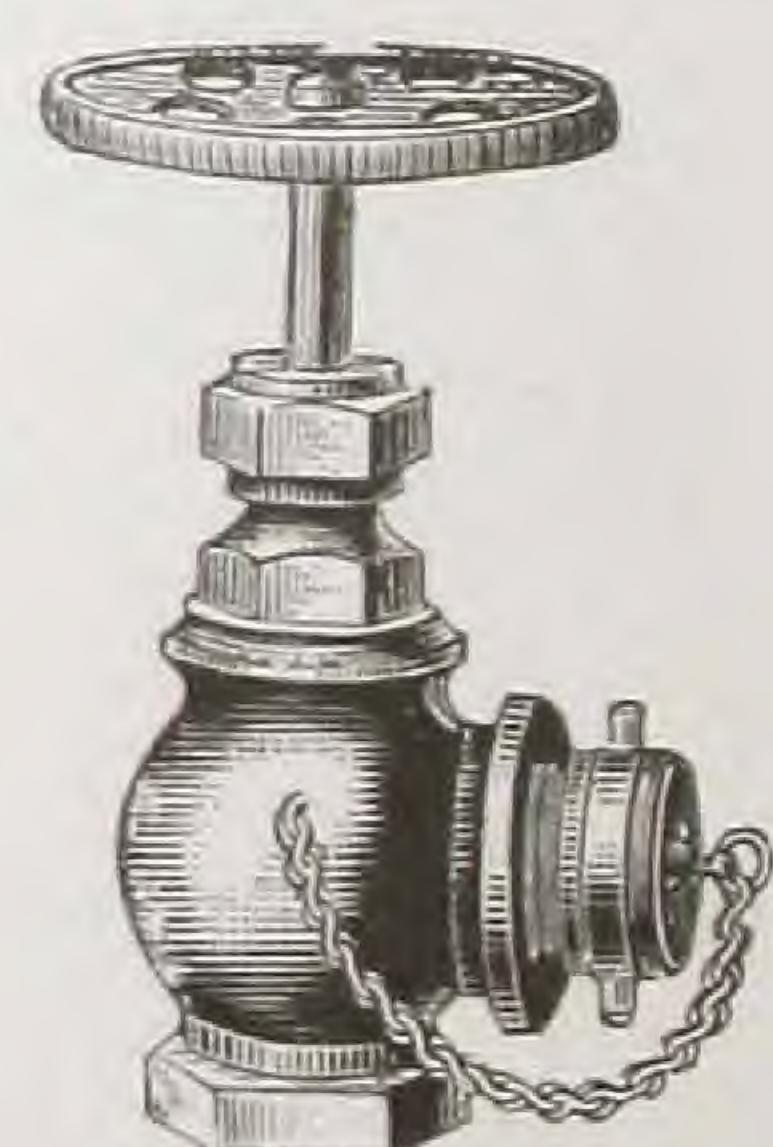


Composition Hose Gate=Valves.

Opening.	No Cap.	Brass.	Nickel.	Cap and Chain Extra.
1	\$2 50	85 00	55 75	\$1 25
1¼	3 50	6 75	7 50	1 75
1½	5 00	9 00	9 75	2 25
2	7 50	13 00	13 75	3 00
2½	14 00	22 00	23 00	3 50

Hose End=Valve.

Inches.	1	1¼	1½	2	2½
Globe and Angle, iron wheel, each.....	\$3 30	4 70	6 50	9 15	17 10
Brass Wheel, finished, each.....	4 55	5 95	8 50	11 65	21 10
Brass Wheel, finished and nickelized, each..	5 30	6 70	9 25	12 50	22 00



FIRE DEPARTMENT NOZZLES.

NEW YORK NOZZLE.



This nozzle throws a solid round stream or a solid flat stream, as desired; is quickly adjusted and of great service to firemen in clearing a room of flame and smoke.

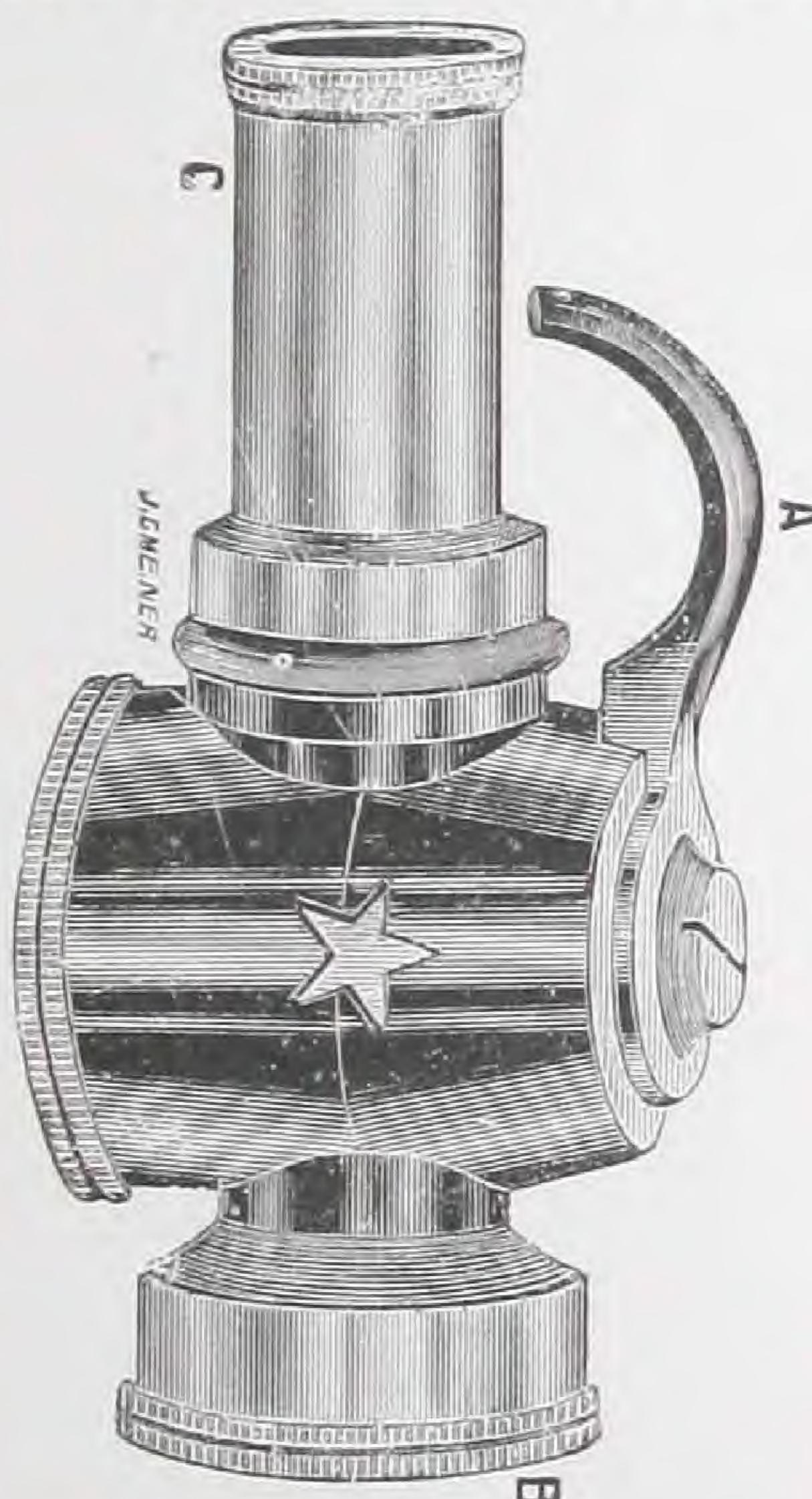
Price of New York Nozzle, complete with shut-off, to fit any play pipe.....\$25 00

New York Flat Stream Nozzle, without shut-off, to fit any play pipe.... 20 00

New York Nozzle, Flat Stream Attachment only, to fit other shut-offs 15 00

Special descriptive matter upon application.

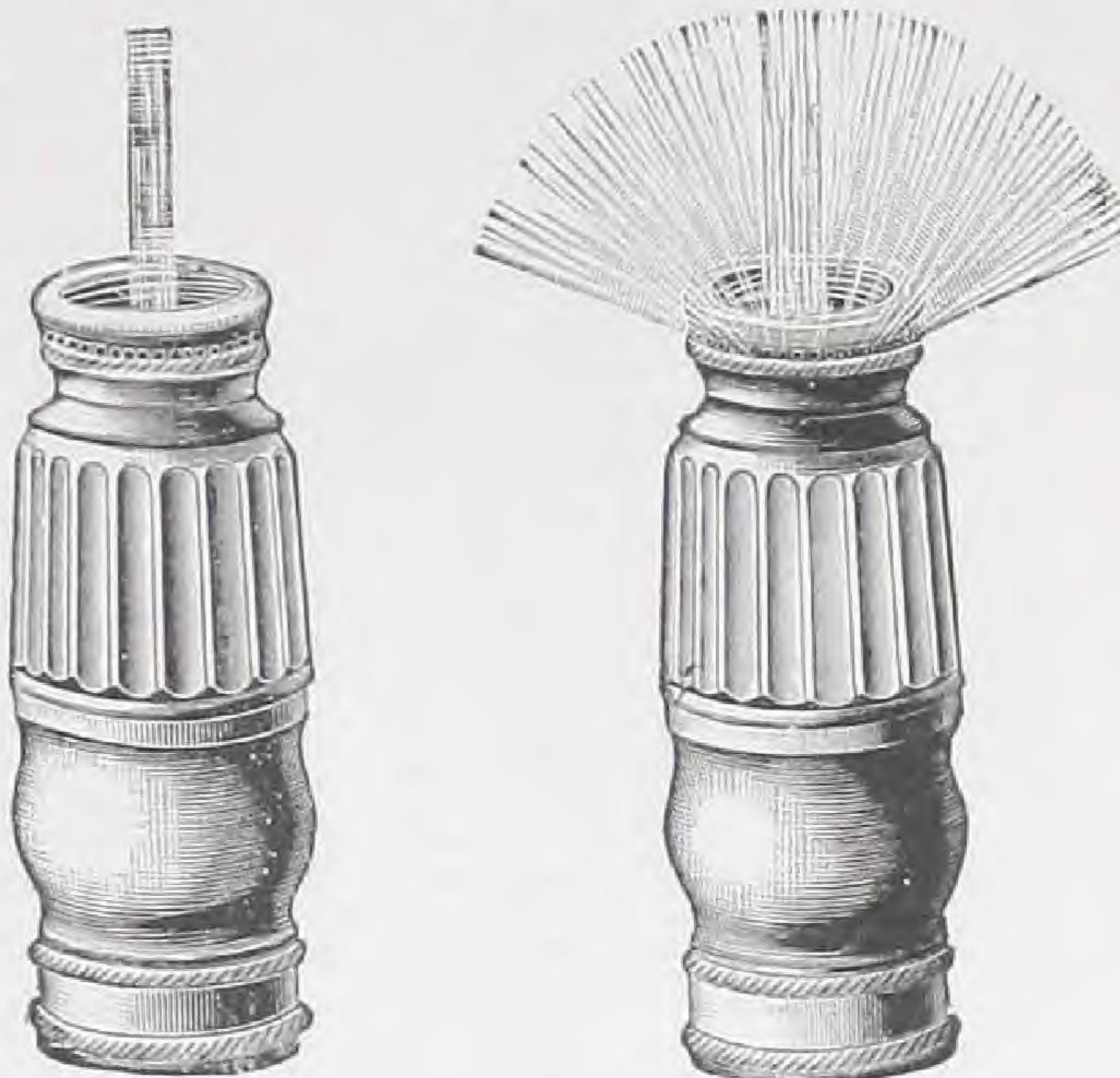
STAR SHUT-OFF NOZZLE.



This nozzle, when open, is like any common nozzle; the bore is clear and smooth; the lever, marked A, opens and closes nozzle as is shown in cut; the heel, marked B, can be threaded to fit any hose-pipe; the tip of nozzle, marked C, can be bored to throw any size stream from 1 to 1½ inch.

Price complete, to fit any play pipe.. \$12 00
Special descriptive matter upon application.

WALDRON NOZZLE.

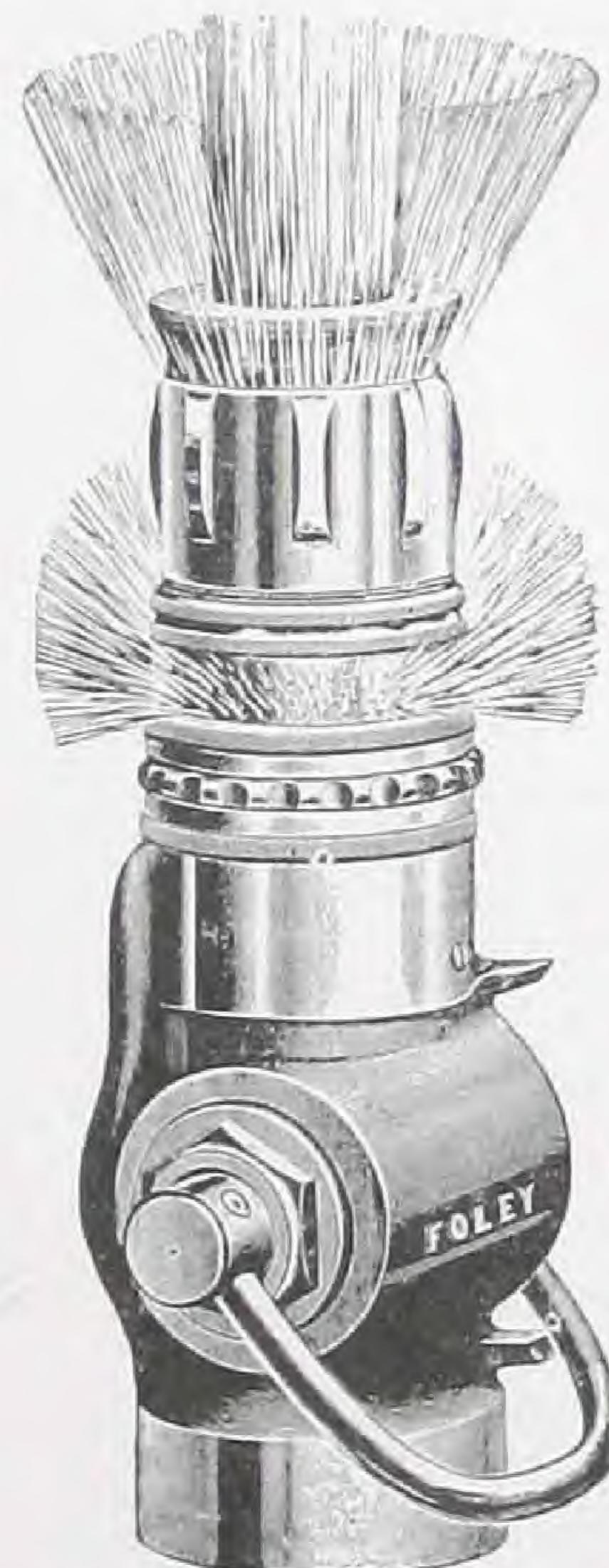


This nozzle throws a solid round stream or round spray stream, or both combined, if desired; easily adjusted and perfect in operation.

Price, complete with shut-off to fit any play pipe.....\$25 00

Special descriptive matter upon application.

FOLEY NOZZLE.



This nozzle throws a solid stream or spray as desired; is ten inches in length; weighs about 4½ lbs. Spray can be produced by three separate devices and one or three sprays as required, can be brought into play at the same time without interfering with the regular flow of water.

Price, complete to fit any play pipe.. \$25 00
Special descriptive matter upon application.



Eastman New Nozzle System.

Outfit No. 1. One Perfection Holder for $2\frac{1}{2}$ -inch hose, 1900 style, fitted with our patent electric grounding device, vulcanized rubber handles; our patent reducer, with two sizes of nozzles, from $\frac{3}{4}$ to $1\frac{1}{4}$ inches. Highly finished and nickel-plated. Length of Holder, either 16 or 20 inches, as desired, \$50.00

Outfit No. 3. One Perfection Holder for 3-inch hose, complete, same as No. 1, with 3 nozzles, any sizes from $1\frac{1}{4}$ to $1\frac{3}{4}$ inches, 60.00

Outfit No. 4. One Perfection Holder for $3\frac{1}{2}$ -inch hose, complete, same as No. 1, with 4 nozzles, any sizes from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches, 100.00

Outfit No. 6. Our complete Two-way Deluge Set, 1900 style; our patent two-way aluminum metal, automatic valve siamese; our $3\frac{1}{2}$ -inch size Perfection Holder, with electric grounding device, vulcanized rubber handles; one section (17 feet) special $3\frac{1}{2}$ -inch rubber-lined hose; our patent $3\frac{1}{2}$ -inch aluminum reducer, nozzles $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{5}{8}$, $1\frac{3}{4}$ and 2 inches, 135.00

Outfit No. 8. Our Three-way Deluge Set, complete, same as No. 6, with our three-way patent automatic valve, aluminum metal siamese; with $1\frac{1}{2}$, $1\frac{5}{8}$, $1\frac{3}{4}$, 2 and $2\frac{1}{8}$ -inch nozzles, 165.00

Outfit No. 10. Our Four-way Deluge Set, complete, same as No. 6, with our four-way patent aluminum metal, automatic valve siamese, with five sizes of nozzles, as desired, 180.00

Outfit No. 11. Our new patent Ariel Ladder Outfit, complete, 1900 style, three-way, with 50 feet special $3\frac{1}{2}$ -inch hose, 4 nozzle sizes 180.00

Outfit No. 12. Our new patent Ariel Ladder Outfit, complete, 1900 style, four-way, with 50 feet special $3\frac{1}{2}$ -inch hose, 4 nozzle sizes, 200.00

Address all Communications to HARRIS SAFETY CO.

Descriptive Matter on Application.

Meyer's Automatic Hose Relief Valve.

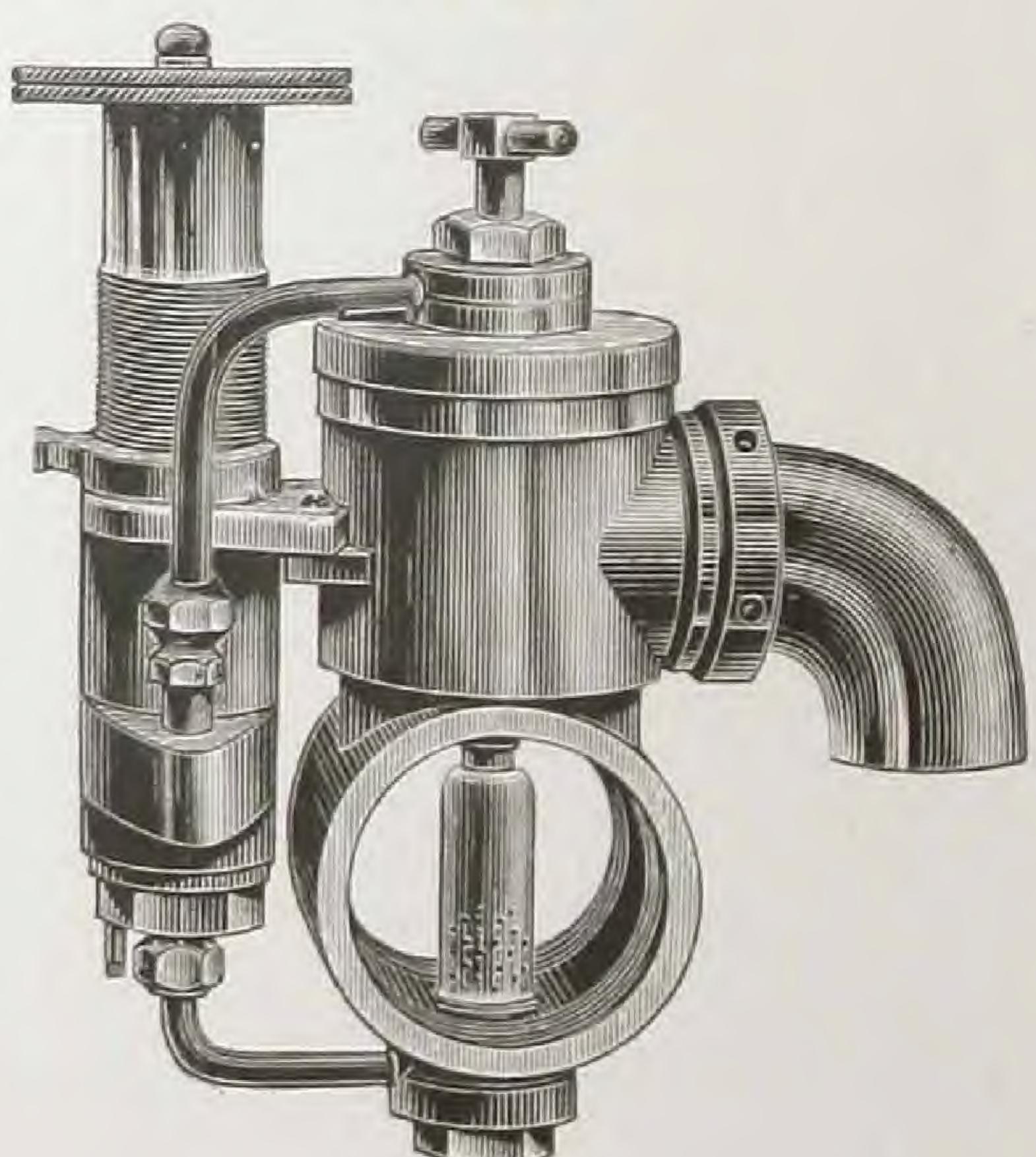
This Ingenious Device Takes the Uneven Pressure from Hose and Saves Its Cost Many Times Every Year.

PRICE:

$2\frac{1}{2}$ -inch size—Fire Dept.,	\$50.00
3-inch size—Fire Boats,	60.00
$3\frac{1}{2}$ -inch size " " and Water Towers, . .	70.00

All Brass, Nickel-Plated, Weight 21 lbs., $5\frac{1}{2}$ inches long, 9 inches high.

Descriptive Matter on Application.



AMERICAN SPANNER.



Will take 1½ to 8 inch coupling.

Price.....per dozen, \$6.00

TABER SPANNER.



Will turn the coupling to right or left without removing it.

Price.....per dozen, \$6.00

ALLEN SPANNER.



The best thing for the purpose—cannot be put on wrong—will turn coupling to right or left without removing it.

Price, Malleable Iron.....per dozen, \$5.00

COMBINED SPANNER AND HYDRANT WRENCH.



Price.....per dozen, \$6.00

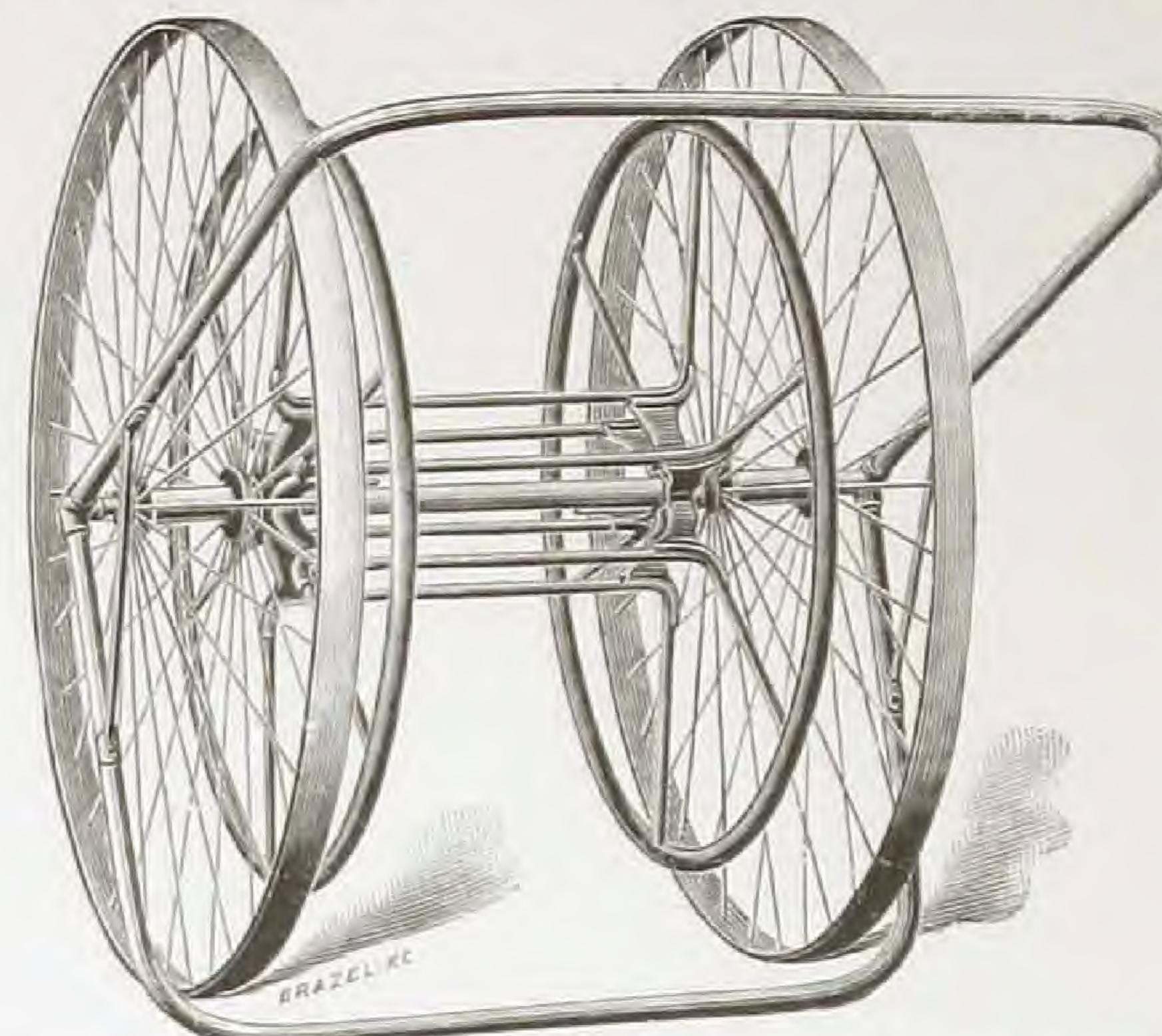
RUBBER GLOVES, HELMETS, COATS AND BOOTS.



Firemen's Short Extra Heavy Gloves,	per doz.,	\$24.00
Firemen's Half-Long Extra Heavy Gloves,	per doz.,	30.00
Firemen's Extra Long Extra Heavy Gloves,	per doz.,	39.00
Driving Gloves, short, heavy wool lined,	per doz.,	24.00
Driving Gloves, half-long, heavy wool lined,	per doz.,	30.00
Firemen's Heavy Rubber Boots....	per doz.,	24.00
Firemen's Extra High Rubber Boots,	per doz.,	36.00
Firemen's Rubber Helmets with Capes, lustre finish.....	per doz.,	7.50
Firemen's Rubber Helmet with Capes, dull finish, heavy.....	per doz.,	8.50
Firemen's Rubber Coats, coated on both sides, galvanized iron snaps and rings....	each,	6.75
Firemen's Rubber Coats, same as above, with elastic inside sleeves.....	each,	8.50

Write for Discounts.

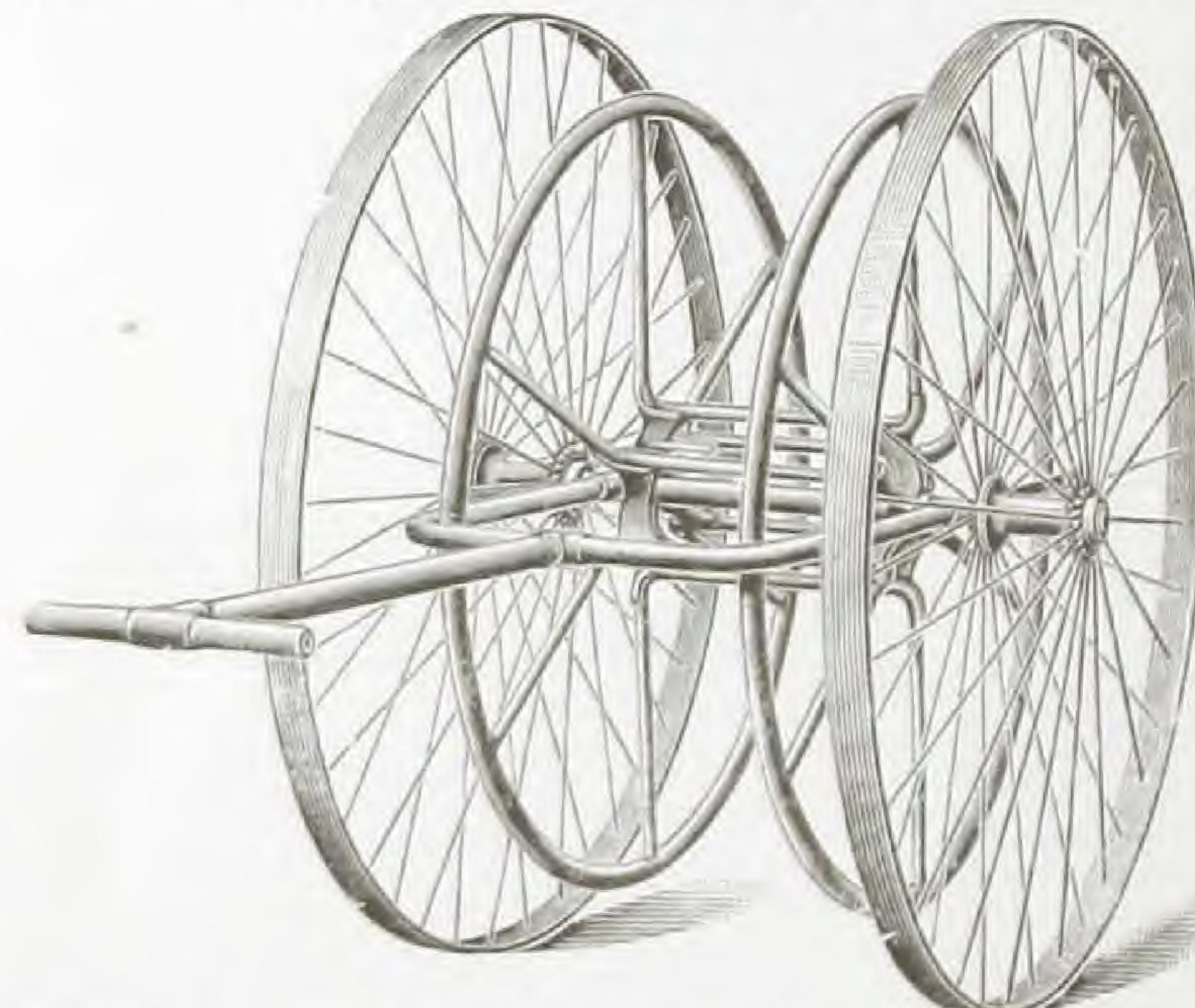
“HARRIS SAFETY” WAREHOUSE REEL.



Suitable for mills, factories and small village fire departments.

No.	Height of Wheel Inches	Outside width of Reel. Inches	Weight Pounds	Capacity 2½ inch Rubber Fire Hose Feet	Price
41	42	37½	130	150	\$35 00
51	48	40	180	300	45 00
61	52	46	200	500	55 00

THE “HARRIS SAFETY” CART.

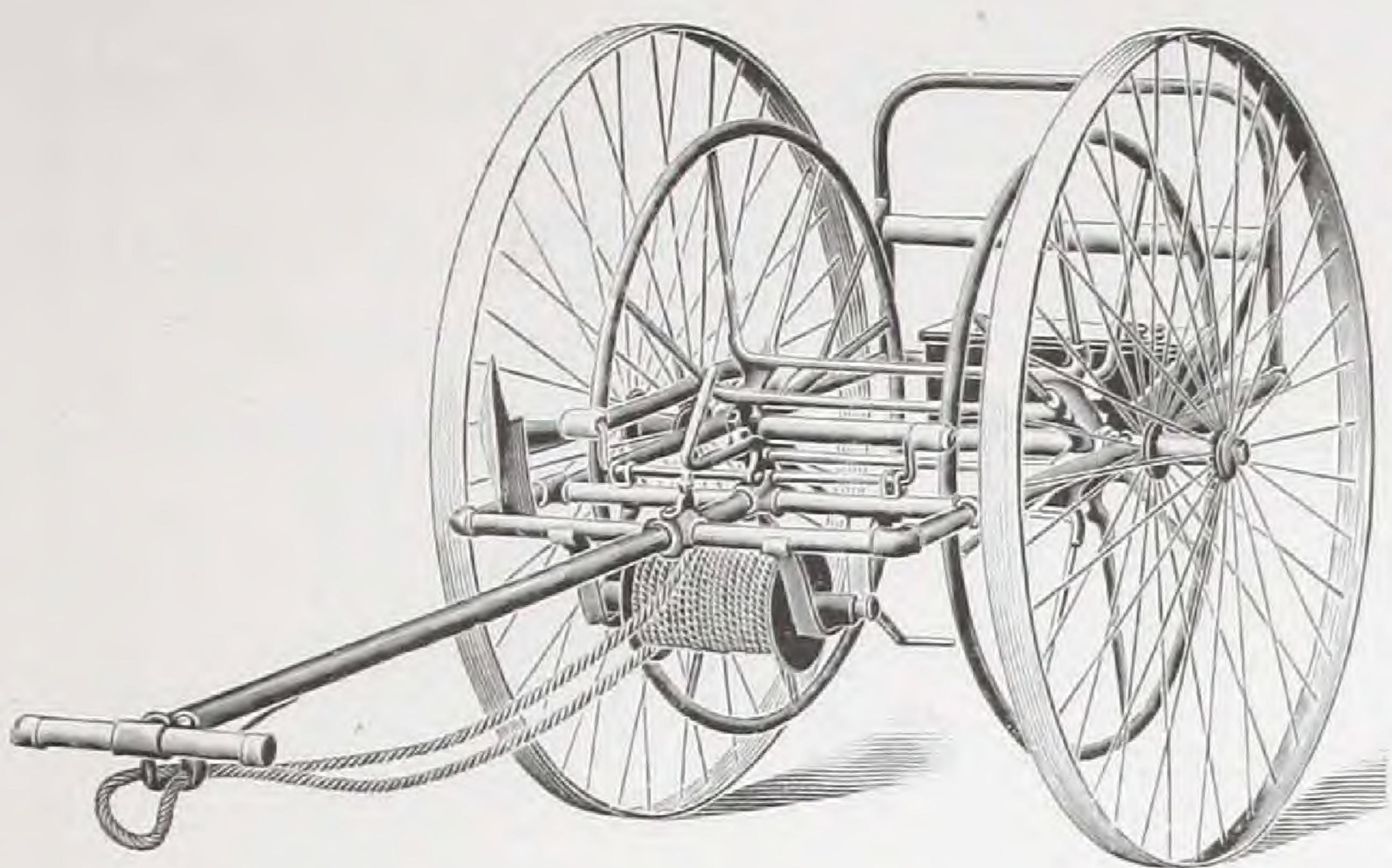


Suitable for railroads, mills, factories, warehouses and small fire departments. Tubular iron frame and steel wheels. Very strong. Handsomely finished in vermillion and black. This cart will be furnished six inches narrower if so desired, without extra cost. Can be taken through ordinary doorways, behind counters and through narrow passages.

No.	Height of Wheel's Inches	Width Outside Inches	Weight Pounds	Capacity 2½ inch Rubber Fire Hose Feet	Capacity 2½ inch Cotton Rubber Lined. Feet	Price
101	42	38½	130	150	300	\$35 00
102	48	41	180	300	600	45 00
103	52	47	200	500	1000	55 00

Discount Estimates furnished.

"HARRIS SAFETY" HOSE CART.



No. 2½.

Steel Wheels, Tubular Steel Frame and Reel, light weight, easy running, and very strong. Has nozzle holder, friction roller, axe rack, tool box, and rope reel for 60 feet of rope.

Height of wheels, 52 inches; tires, $2\frac{1}{2}$ inches.

Capacity: 450 feet of $2\frac{1}{2}$ -inch rubber fire hose; 500 feet of 2-inch rubber fire hose; 700 feet of $2\frac{1}{2}$ -inch cotton rubber-lined hose; 1,000 feet of $2\frac{1}{2}$ -inch unlined linen hose. Handsomely finished in vermillion and green.

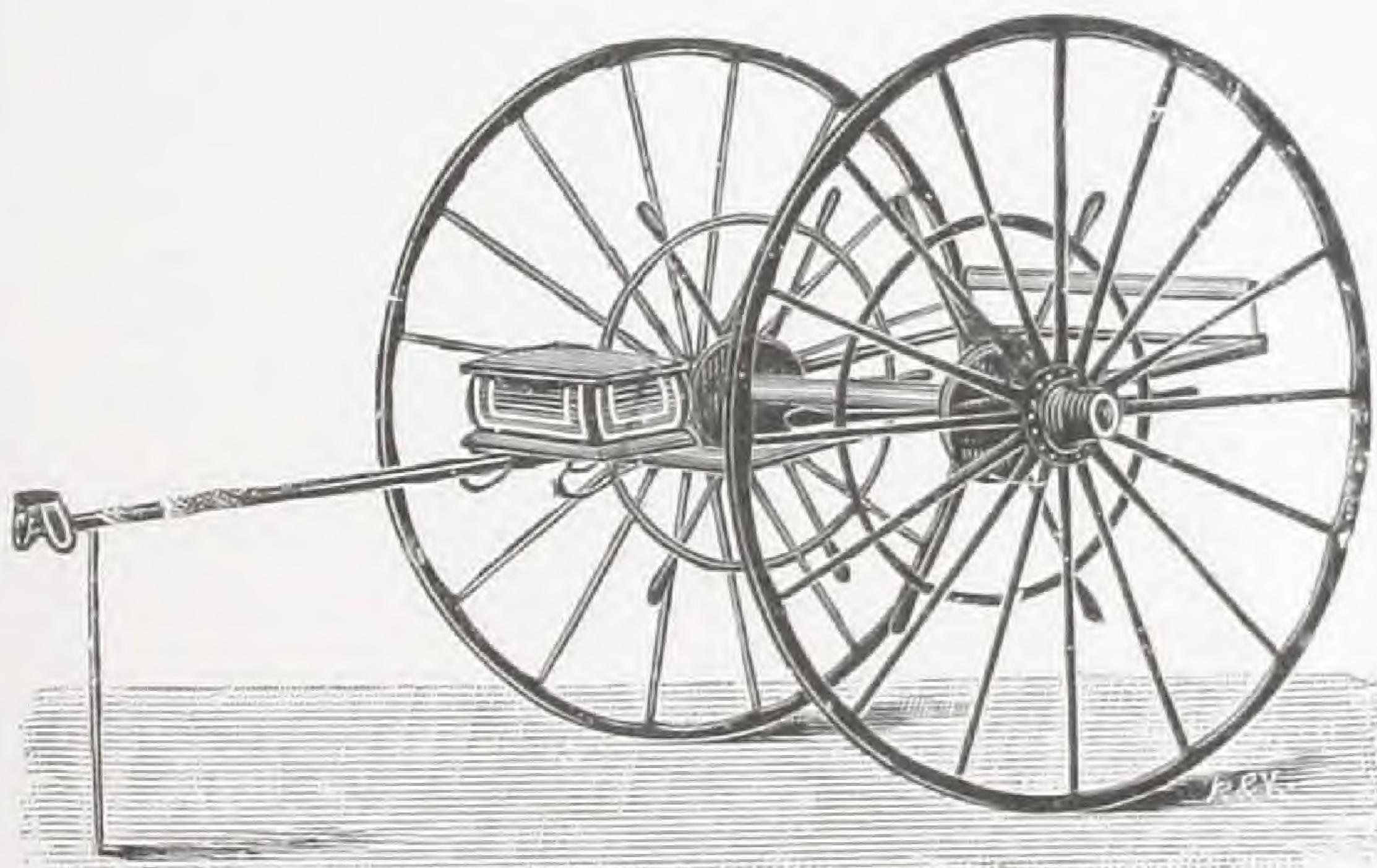
Price.....\$100 00

No. 3½.

Capacity: 500 feet of $2\frac{1}{2}$ -inch rubber fire hose; 750 feet of $2\frac{1}{2}$ -inch rubber-lined hose; 1,250 feet of $2\frac{1}{2}$ -inch unlined linen hose. Height of wheels, 60 inches; $2\frac{1}{2}$ -inch tires. Firemen's axe and 60 feet of rope furnished with this number.

Price.....\$125 00

"HARRIS SAFETY" DEPARTMENT SERVICE CART.



EQUIPMENTS.—Fifty feet Drag-rope, Rope-reel, two Pipe-holders, one 12-inch Automatic Brass Gong, one Fire Axe, one Crowbar, Tool-box, Wrenches, two Solid Brass Torches, Chain-reel and Crank, Patent Sarven Wheels five feet six inches, Heavy Forged Steel Axle, Forged Frame and Round Pole dovetailed to frame (neat and strong). Drum fitted with extra heavy Pipe spokes, giving strength, lightness and durability over solid iron. Handsomely painted English Vermilion, striped with Gold Leaf. All brass work, including Hub Bands, heavily Nickel-plated. This is a beautiful first-class cart in every respect, superior to many sold at a much higher figure. No better built.

Price, f. o. b. factory, Crated for shipment, with suitable lettering \$250 00

Discount Estimates furnished,



The "DIETZ" Lanterns.

Regulation Fire Department Lantern.

Round Tube, Highest Quality.

Per Dozen..... \$48 00

Estimates on all qualities.



THE "MIDGET" SMOKE PROTECTOR.

Standard Guaranteed Quality.

Each..... \$3 50



THE "COVER" SMOKE PROTECTOR.

Fitted with automatic breathing valve, water sponge, and steel-wire screen.

Complete..... per dozen, \$24 00

GALVANIZED IRON FIRE PAILS For Apartments, Hotels, Factories, Warehouses, Etc., Etc.

FLAT BOTTOM.

10 quart.....	per dozen, \$4 50
12 " "	" 5 00
14 " "	" 5 50
Pails, Red Japanned, add.....	1 00

Stencilled "For Fire Only."

ROUND BOTTOM.

10 quart, covers.....	per dozen, \$2 00
12 " "	" 2 25
14 " "	" 2 50
Pails, Japanned, add.....	1 00

Stencilled "For Fire Only."

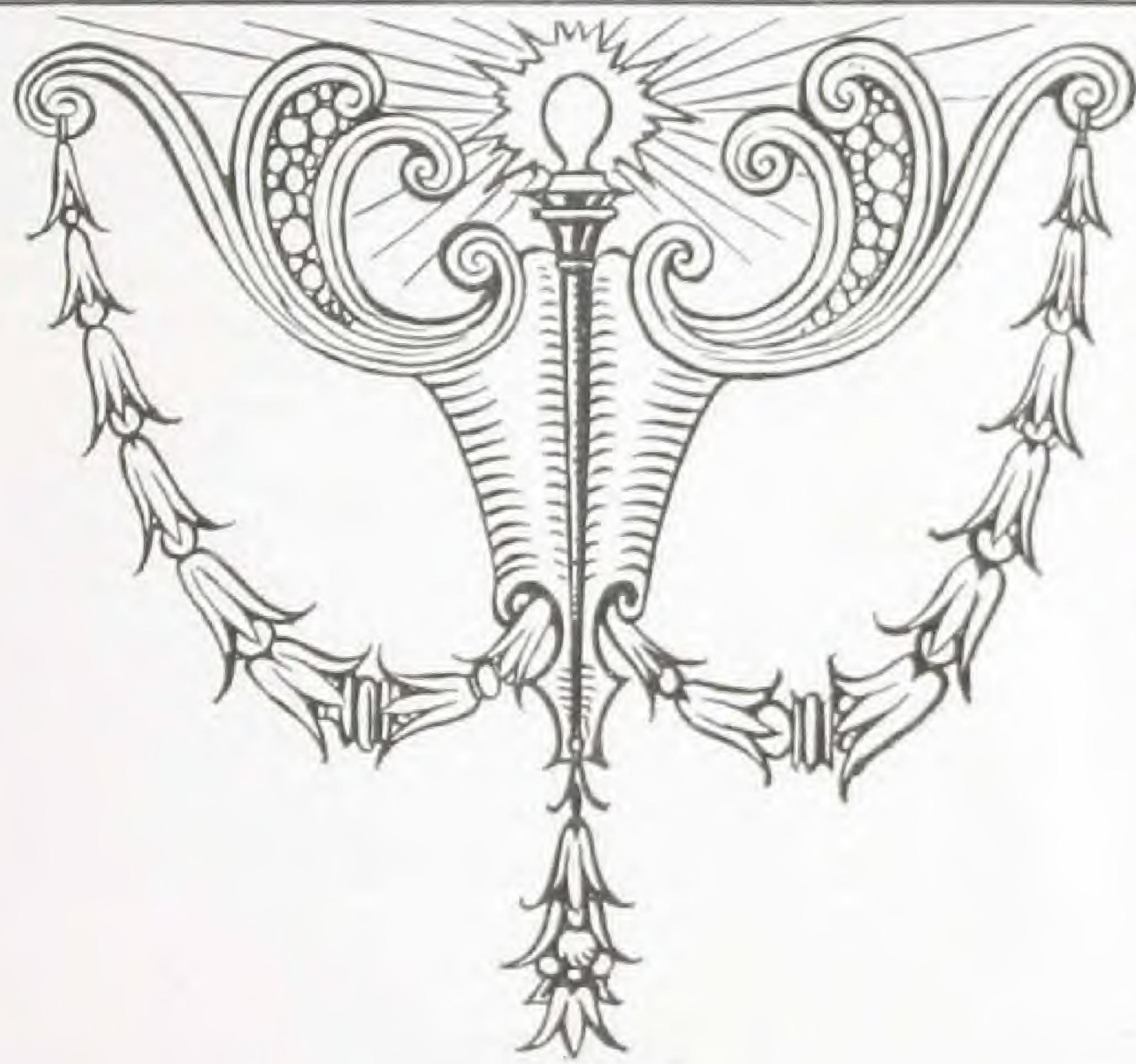
ROUND BOTTOM.

10 quart.....	per dozen, \$6 75
12 " "	" 7 25
14 " "	" 7 50

Discount on application.

Fire Axes and Fire Hooks...per set, \$5 00
Regulation Fire Axes and Fire Hooks,
per set..... 6 00

M O D E R N
STRUCTURAL
FIRE
Escapes



*The National System of
Stair Fire Escapes*

GOLD MEDAL
PARIS EXPOSITION

General Description and Specification

OF SIZES AND CONSTRUCTION OF

National System of Stair Fire Escapes

Officially Approved Throughout the World

The National System of Stair Fire Escape is an arrangement of short flights of stairs with intermediate platforms or landings, enclosed on all sides with wire or iron railings, making it as convenient as an ordinary staircase.

There are four standard sizes, namely:

Model "A" Standard, size 4' 1" front by 4' 6" side, giving a stairway 2' 0" wide, with three 6" treads between the platforms. This is the most desirable for factory, office and mercantile buildings.

Model "B" Standard, size 4' 1" front by 5' 0" side, giving a stairway 2' 0" wide with four 6" treads between the platforms. This is the most desirable size for schools, asylums, assembly halls, public and private buildings.

Model "C" Standard, size 5' 0" front by 6' 0" side, giving a stairway 2' 6" wide with four 6" treads between the platforms.

Model "D" Standard, size 5' 0" front by 8' 0" side, giving a stairway 2' 6" wide with five 9" treads between the platforms.

Models "C" and "D" are especially designed for theaters, hospitals, Homes for the Aged, Crippled and Infirm, Asylums for the Feeble Minded and Insane

Model "D" being especially designed as a convenient flight of stairs for an attendant to carry down sick patients.

The National Fire Escape is simple, practicable, safe and sure.

The National Fire Escape affords rapid and safe exit in the time of panic.

The National Fire Escape does not pass in front of windows : persons once entering the stairways have a clear and safe descent, without the danger of passing through flames or red hot iron work.

The National Fire Escape affords complete protection for the young, the old, the crippled or infirm.

The National Fire Escape is the only safe fire escape for practice and fire-drills.

The National Fire Escape is especially adapted for institutions or asylums ; being entirely enclosed with heavy wire it prevents escape or injury.

The National Fire Escape has been time-tried and in actual fire test has proven far superior to any other escape.

The National Fire Escape adds to, rather than detracts, from the architectural symmetry of a building.

The National Fire Escape was awarded Gold Medal, Paris Exposition.

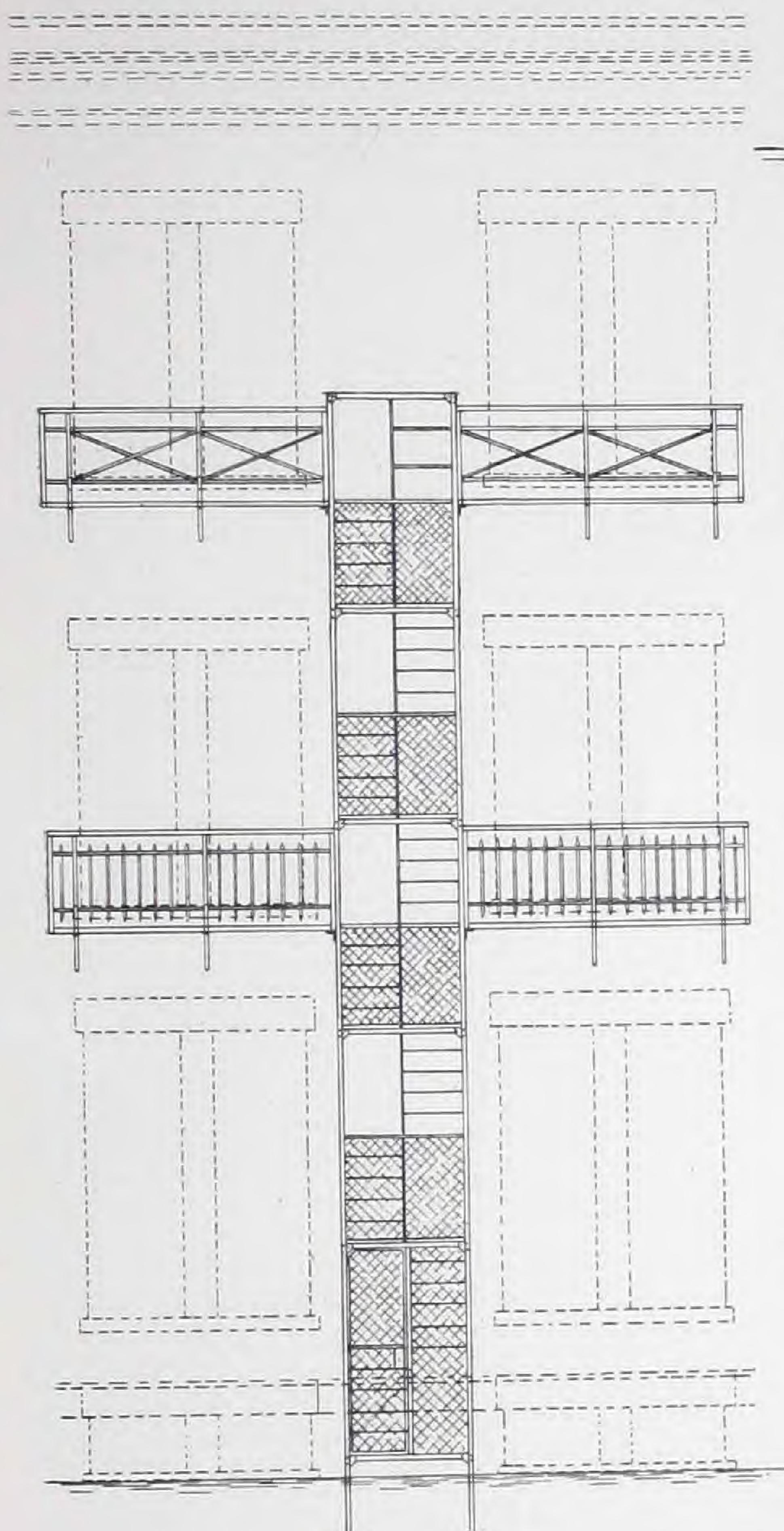
The National Fire Escape with its series of short flights of stairs and intermediate landings, placed on the blank wall of a building between windows, makes it far superior to the ordinary long, steep outside stairways for timid or panic stricken persons, whom are apt to lose control of their senses at the time of excitement.

The National Fire Escape has a capacity equal to four ordinary fire escapes ; a continuous procession can move downward without interruption or the danger of being trampled upon, or pushed off, as overloading is impossible.

Plans, Specifications and Estimates Cheerfully Furnished.

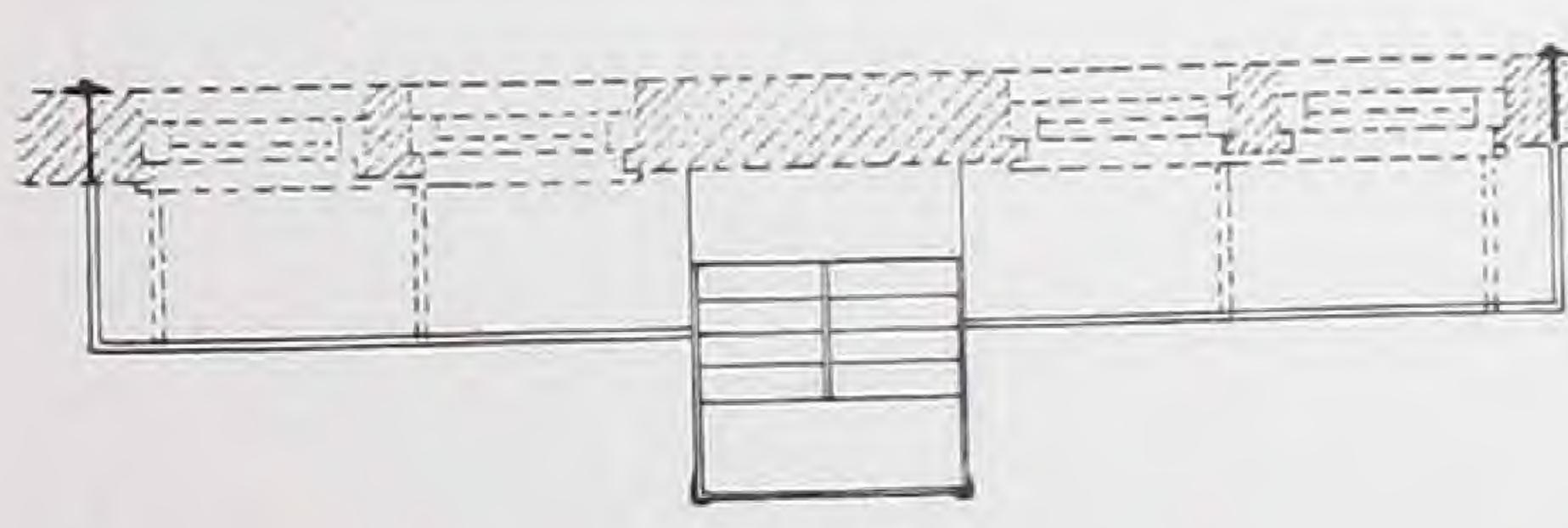
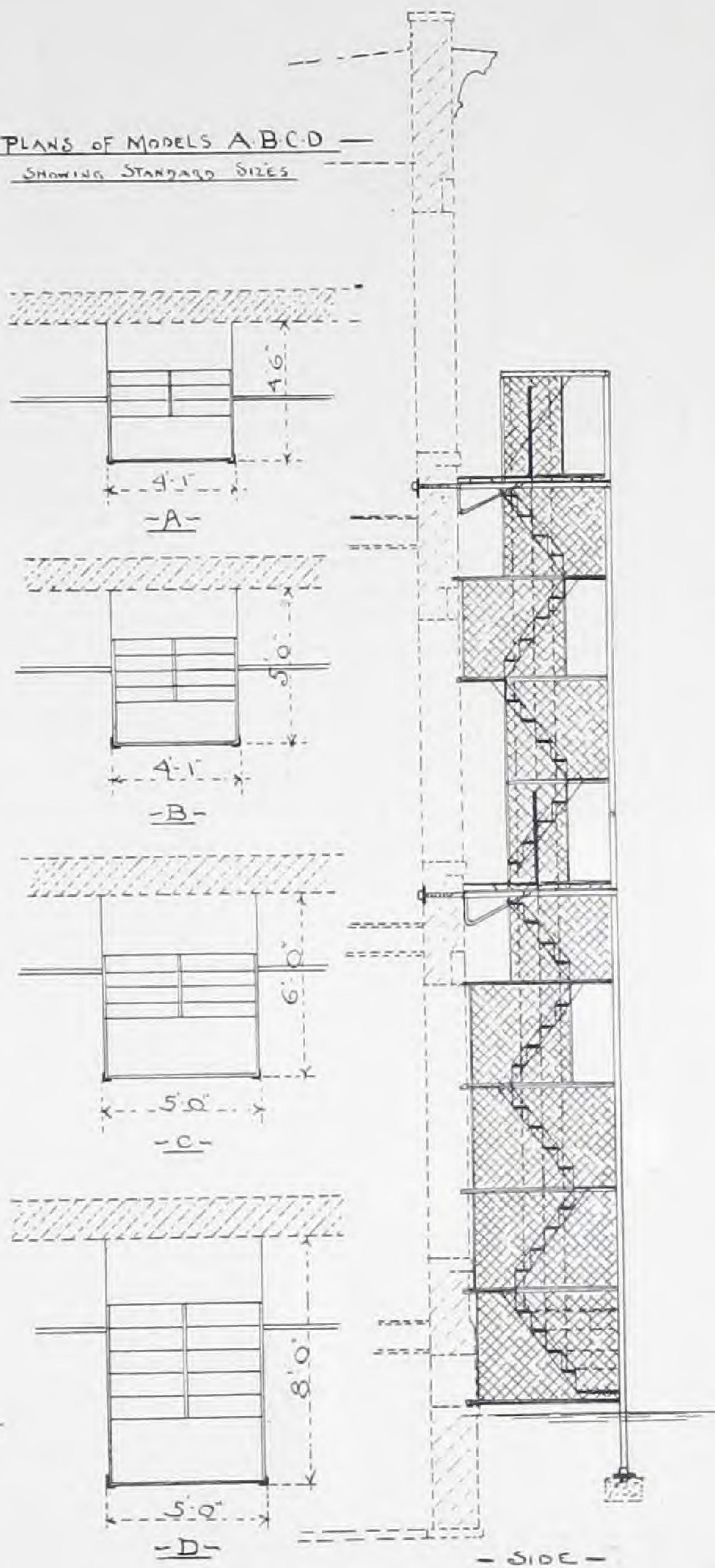
SEND THE FOLLOWING INFORMATION FOR ESTIMATES.

1. Distance from the ground to first story window sill.
2. Distance from first story window sill to second story window sill, and so on to top story, giving each story separately.
3. Distance from top story window sill to roof.
4. Distance between windows where Escape is to be placed (said space cannot be less than 4' 0").
5. Width of window openings. State if the balconies are to take in one or more windows, giving measurements from pier upon which the stairway is to be placed.
6. State style of Escape required—Model A, B, C, or D.
7. Projection and location of all cornices, belt courses, water-tables, etc.
8. A sketch showing ground plan and section with the above figures marked thereon, a plan, photograph or cut of the building, will assist us in making a close estimate.



- FRONT -

PLANS OF MODELS A B C D
SHOWING STANDARD SIZES



- PLAN -

- THE -
NATIONAL SYSTEM STAIR
— FIRE-ESCAPE —

— HARRIS SAFETY COMPANY —
SOLE MANUFACTURERS

Specification of Balcony and Stairway Fire-Escapes.

BALCONIES.

BRACKETS.

The brackets shall not be less than $\frac{1}{2}$ -inch by $1\frac{3}{4}$ -inch bars placed edgewise, or $1\frac{1}{2}$ -inch angle iron, $\frac{1}{4}$ -inch thick, well braced; they shall not be more than 4 feet apart and shall be braced by means of not less than $\frac{3}{4}$ -inch square wrought iron and shall extend two-thirds the width of the balcony or brackets. The brackets shall go through the wall and be turned down 3 inches or be properly secured by nuts and 4-inch square washers at least $\frac{3}{8}$ -inch thick. On new buildings the brackets shall be set as the walls are being built; on old buildings the part going through the wall shall not be less than one inch in diameter with screw nuts and washers not less than 5 inches square and $\frac{1}{2}$ -inch thick.

RAILINGS.

The outside top rail shall extend around the entire length of the platform and in all cases shall go through the wall at each end and be properly secured by nuts and 4-inch square washers $\frac{3}{8}$ -inch thick, and no top rail shall be connected at angles by cast iron. The top rail shall be $1\frac{1}{4}$ -inch by $\frac{1}{2}$ -inch wrought iron or $1\frac{1}{2}$ -inch angle iron $\frac{1}{4}$ -inch thick. The bottom rail shall be $1\frac{1}{2}$ -inch by $\frac{3}{8}$ -inch wrought iron or $1\frac{1}{2}$ -inch angle iron $\frac{1}{4}$ -inch thick, well leaded into the wall. The filling-in bars shall be not less than $\frac{1}{2}$ -inch round or square wrought iron, well riveted to top and bottom rails and platform frame, and they shall be securely braced by outside brackets at suitable intervals, and not more than 6 inches on centers. The height of rails shall be in no case less than 2 feet 9 inches.

FLOORING.

The floor of balconies shall be of wrought iron or steel slats, not less than $1\frac{1}{2}$ -inches by $\frac{3}{8}$ -inch, not more than $1\frac{1}{4}$ inches apart, and well secured and riveted at the intersection. The openings for stairways shall not be less than 21 inches wide by 36 inches long, and shall have no covers. The floor of balconies shall safely sustain a load of not less than 80 pounds per square foot of surface.

STAIRWAYS.

The stairways shall safely carry a load of not less than 100 pounds per step, with the exception of the treads, which must safely sustain a load of 200 pounds. The treads shall be flat, open treads, not less than 6 inches wide with a rise of not more than 9 inches. The stairs shall be not less than 20 inches wide. The strings shall not be less than 3-inch channels of iron or steel, or other shape equally strong, and shall rest upon and be fastened to a bracket. The strings shall be securely fastened to the balcony at the top, and the steps in all cases shall be double-riveted or bolted to the strings. The stairs shall have $\frac{3}{4}$ -inch handrail of wrought iron well braced.

STAIR LADDERS.

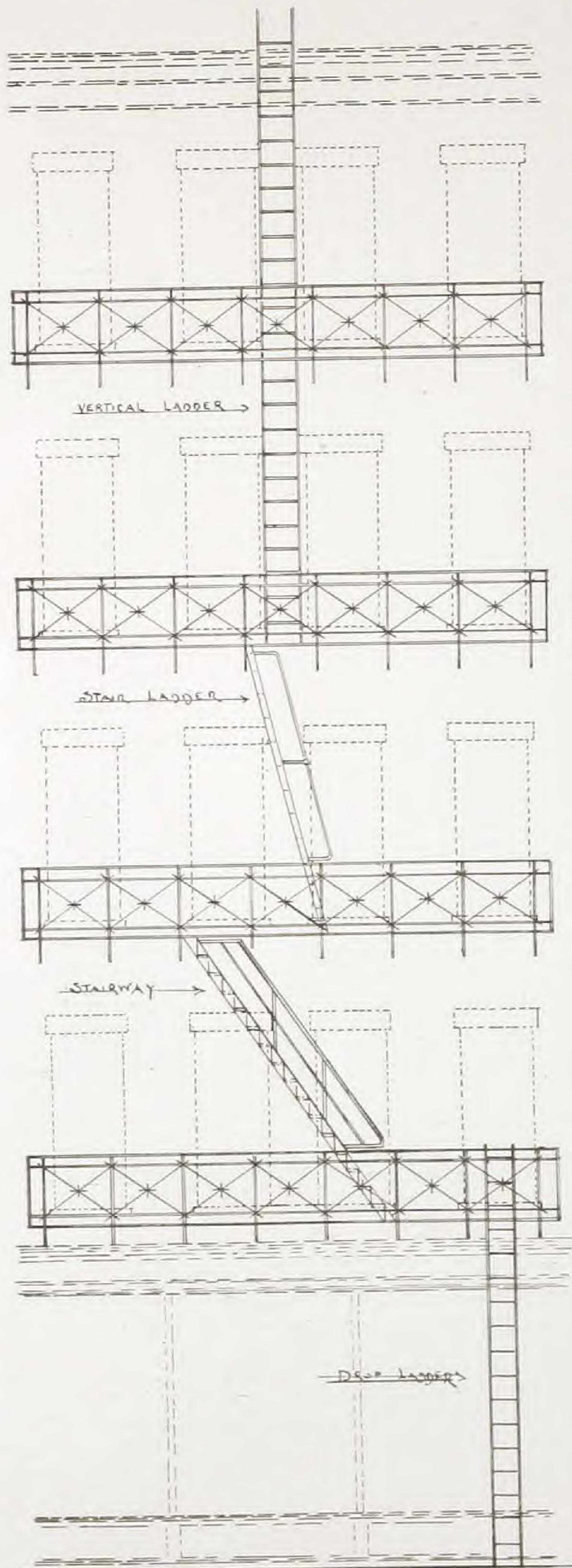
The stair ladders, in all cases, shall not be less than 18 inches wide, and constructed of $\frac{1}{4}$ -inch by $3\frac{1}{2}$ -inch flat iron strings, steps to be formed of two $\frac{5}{8}$ -inch round bars full width of string and well riveted to same, the stairs to be secured at top to bracket and to rest on and be secured to bracket at bottom, stairs to be provided with a $\frac{3}{4}$ -inch hand rail, well braced.

DROP STAIRS.

The drop stairs, in all cases, shall be constructed in accordance with the above specification for Stair Ladders, except they shall be securely hinged to landing and hung up with a proper weight and cable.

DROP LADDERS.

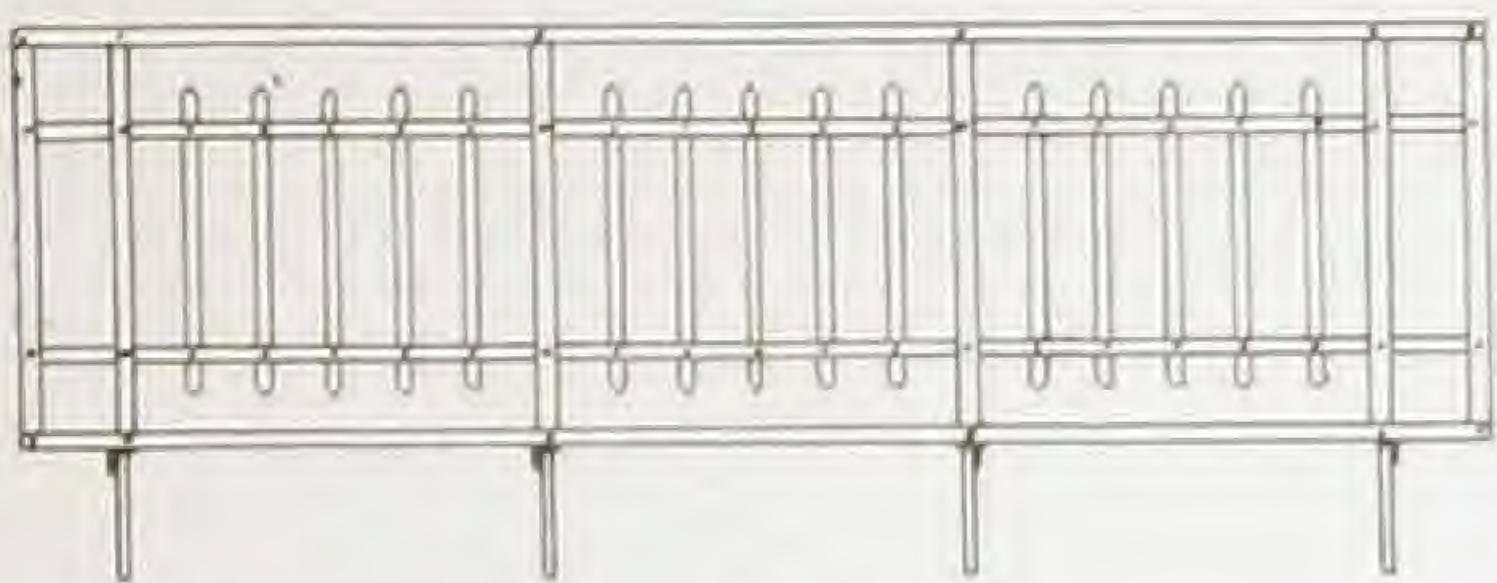
Drop ladders shall not be less than 14 inches wide, and to be made of $1\frac{1}{2} \times \frac{3}{8}$ -inch strings, with rungs $\frac{5}{8}$ -inch round, thoroughly riveted to strings.



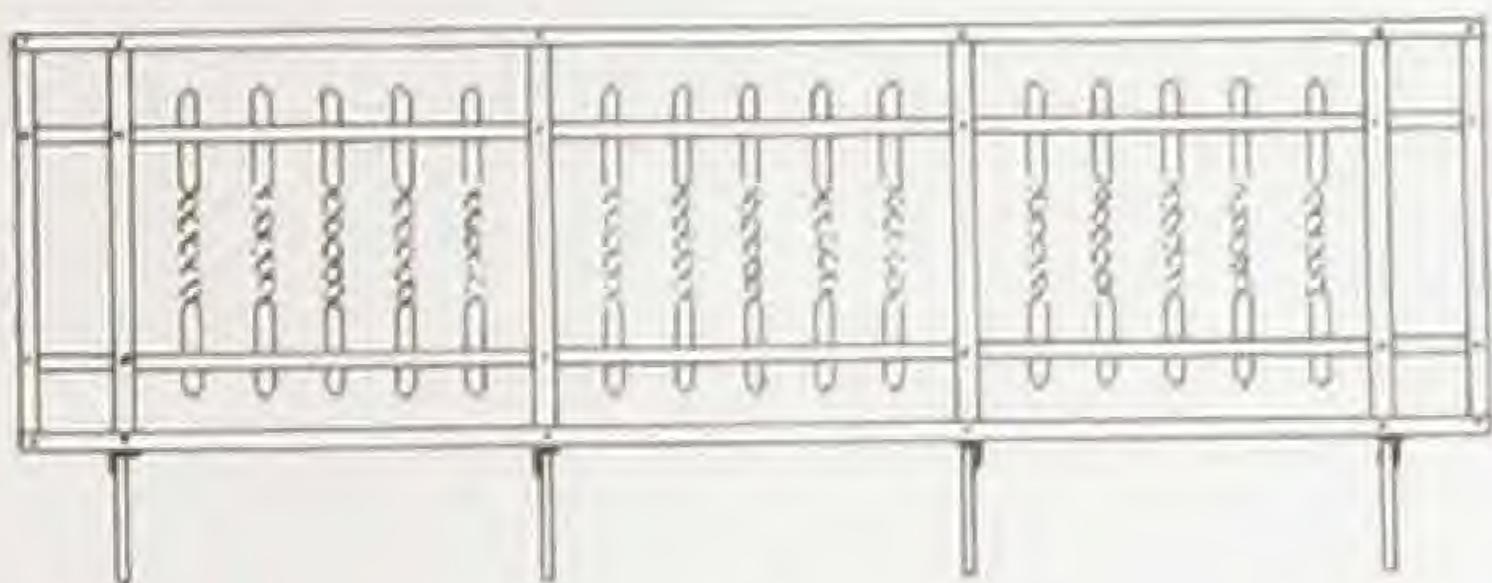
N^o 1



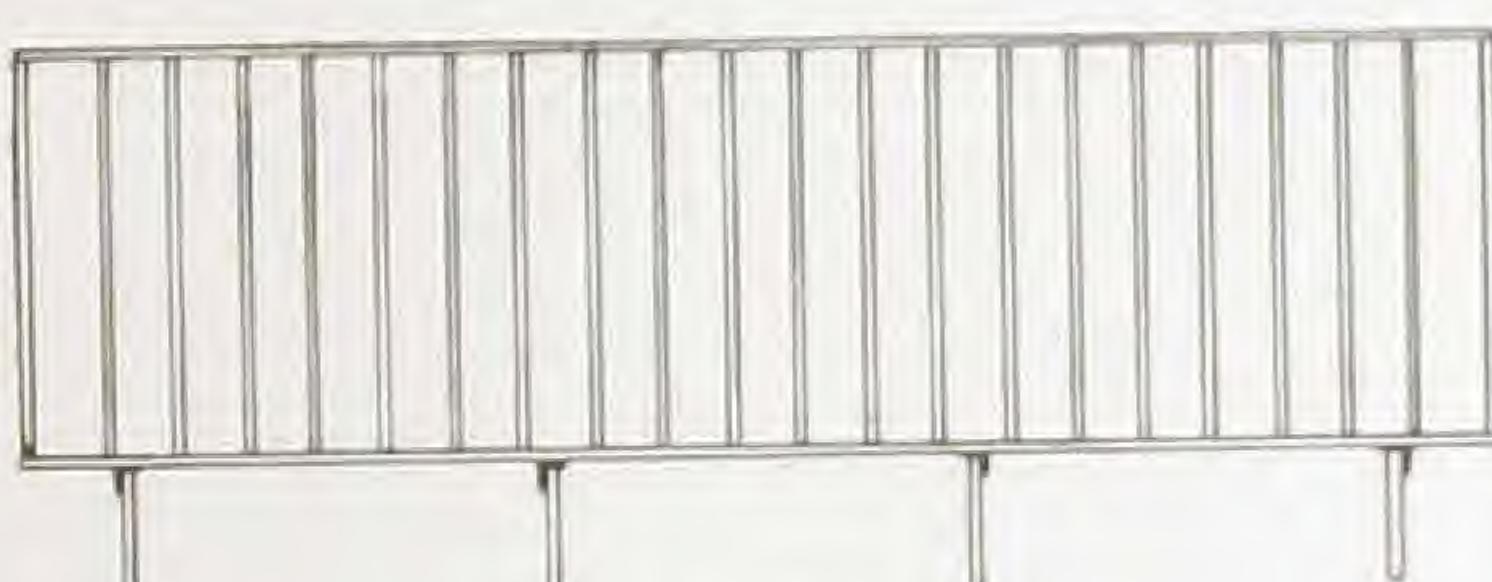
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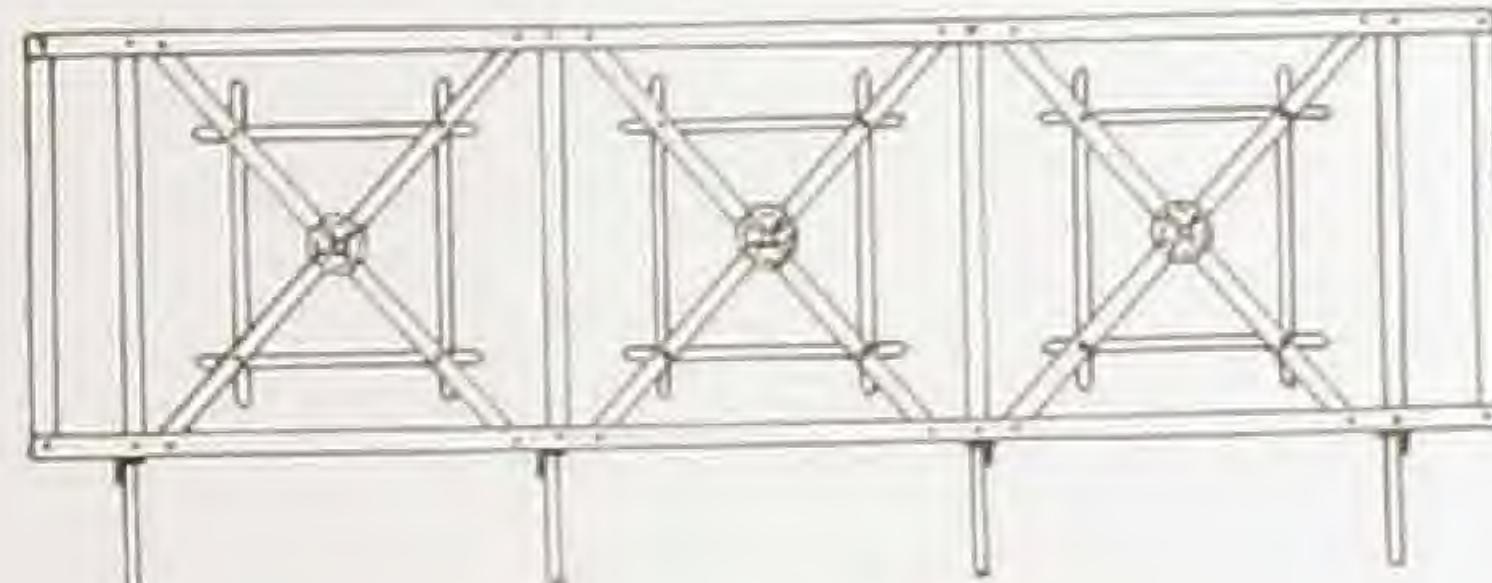
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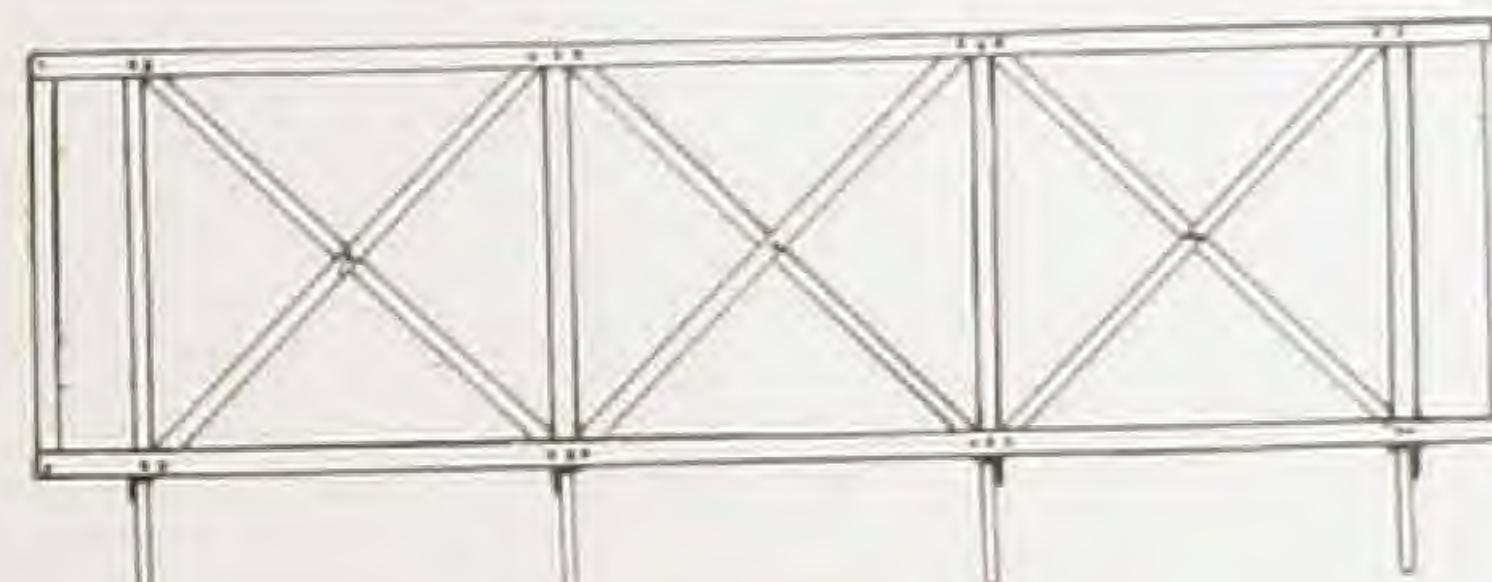
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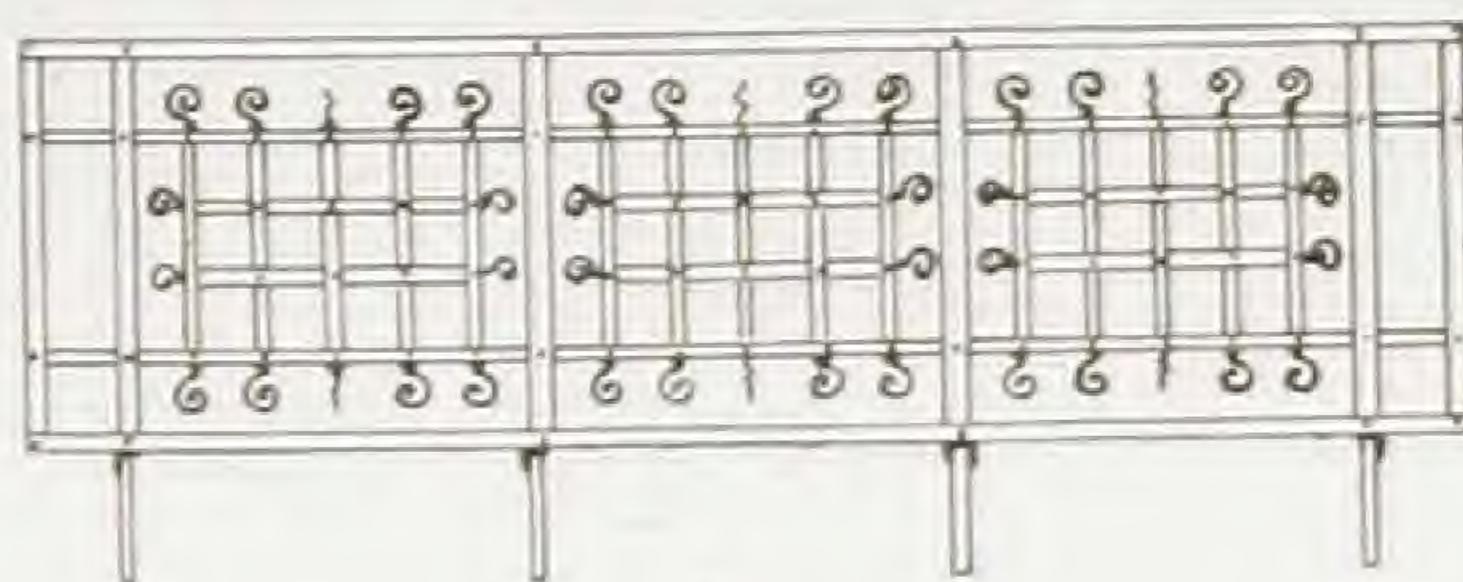


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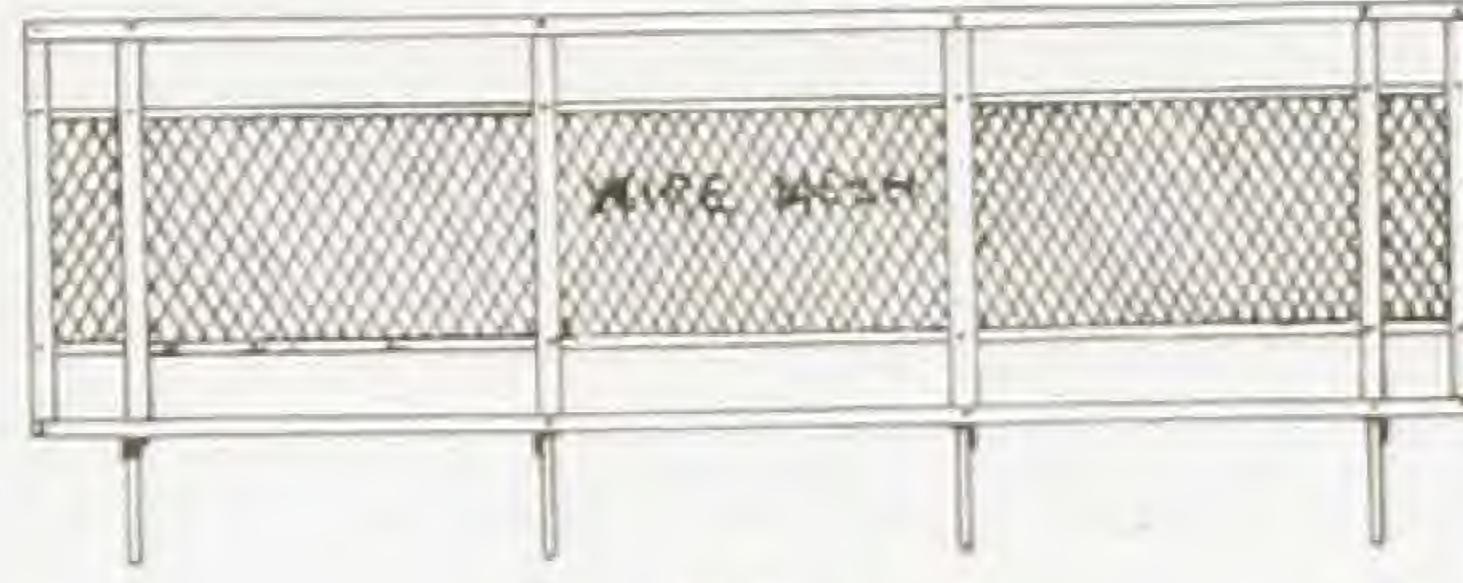


HARRIS
SAFETY CO.
N.Y.

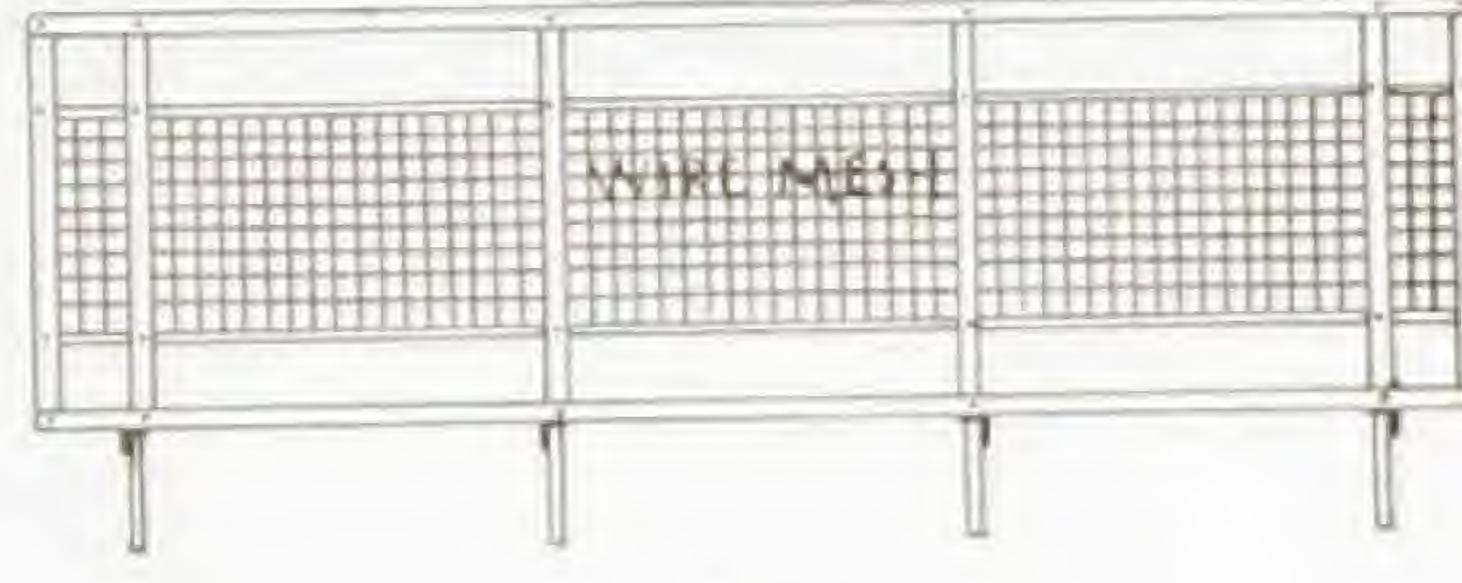
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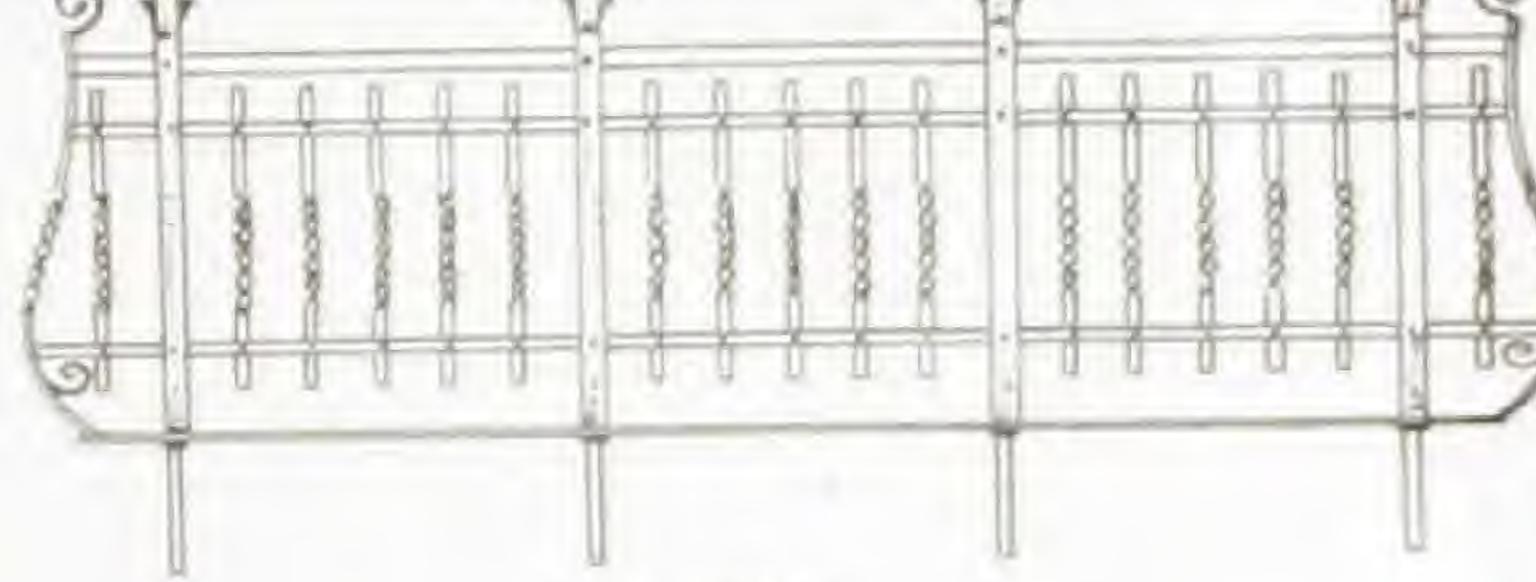
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N^o 9



N^o 10



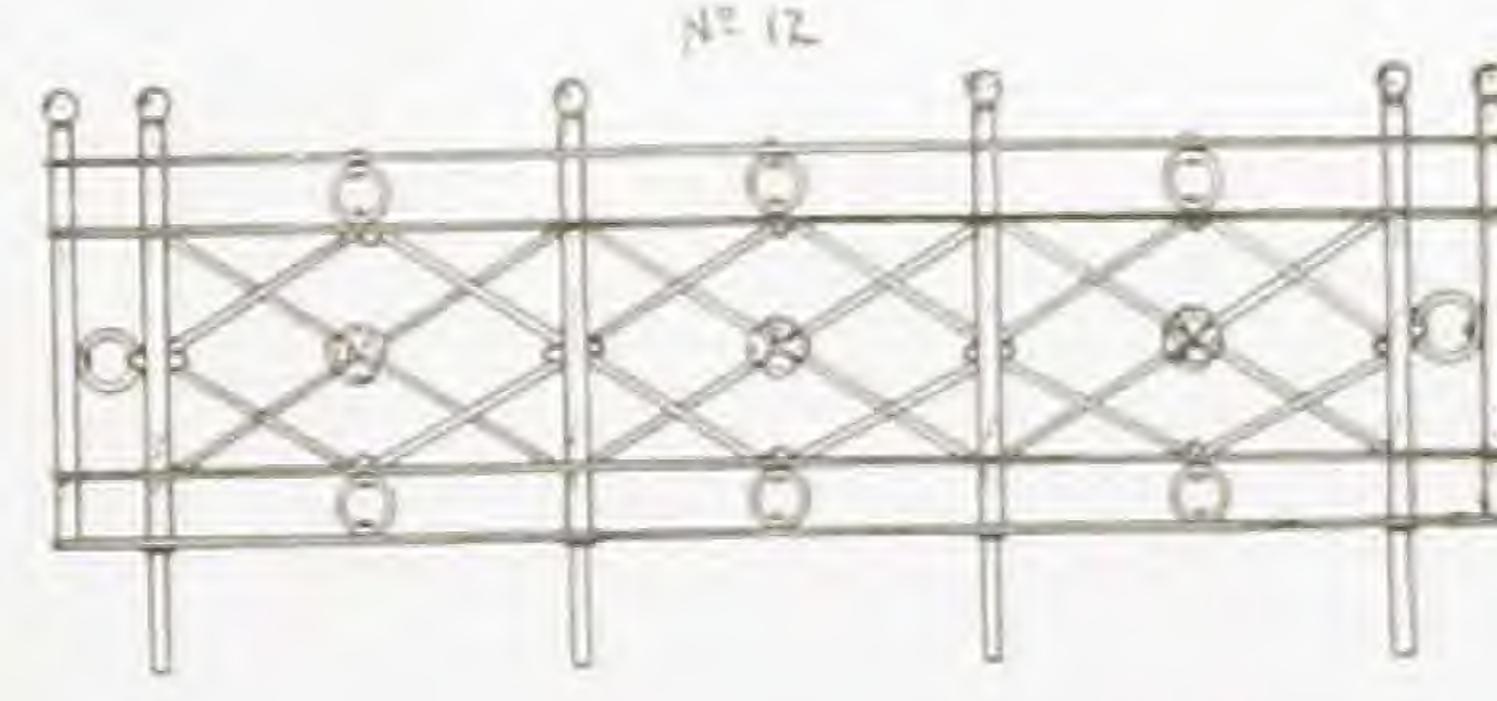
N^o 11



DESIGNS
OF
RAILINGS
FOR
FIRE-ESCAPE
BALCONIES

SPECIAL
DESIGNS FURNISHED
UPON
APPLICATION

N^o 12



THE BUREAU OF BUILDINGS.

WILLIAM STEWART
Superintendent

FOR THE BOROUGH OF MANHATTAN
1125 BROADWAY AVENUE,
S.W. CORNER 18TH ST.
P.M.S.—F.

The City of New York Sept. 16, 1902.

The Harris Safety Co.,
1155 Broadway, City.

Gentlemen:-

Your National System of Stair Fire Escapes is approved by the Bureau of Buildings, for use in the Borough of Manhattan, City of New York, wherever outside fire escape balconies are required on buildings.

Respectfully,

W.R. M. Stewart

William Stewart

Superintendent of Buildings,

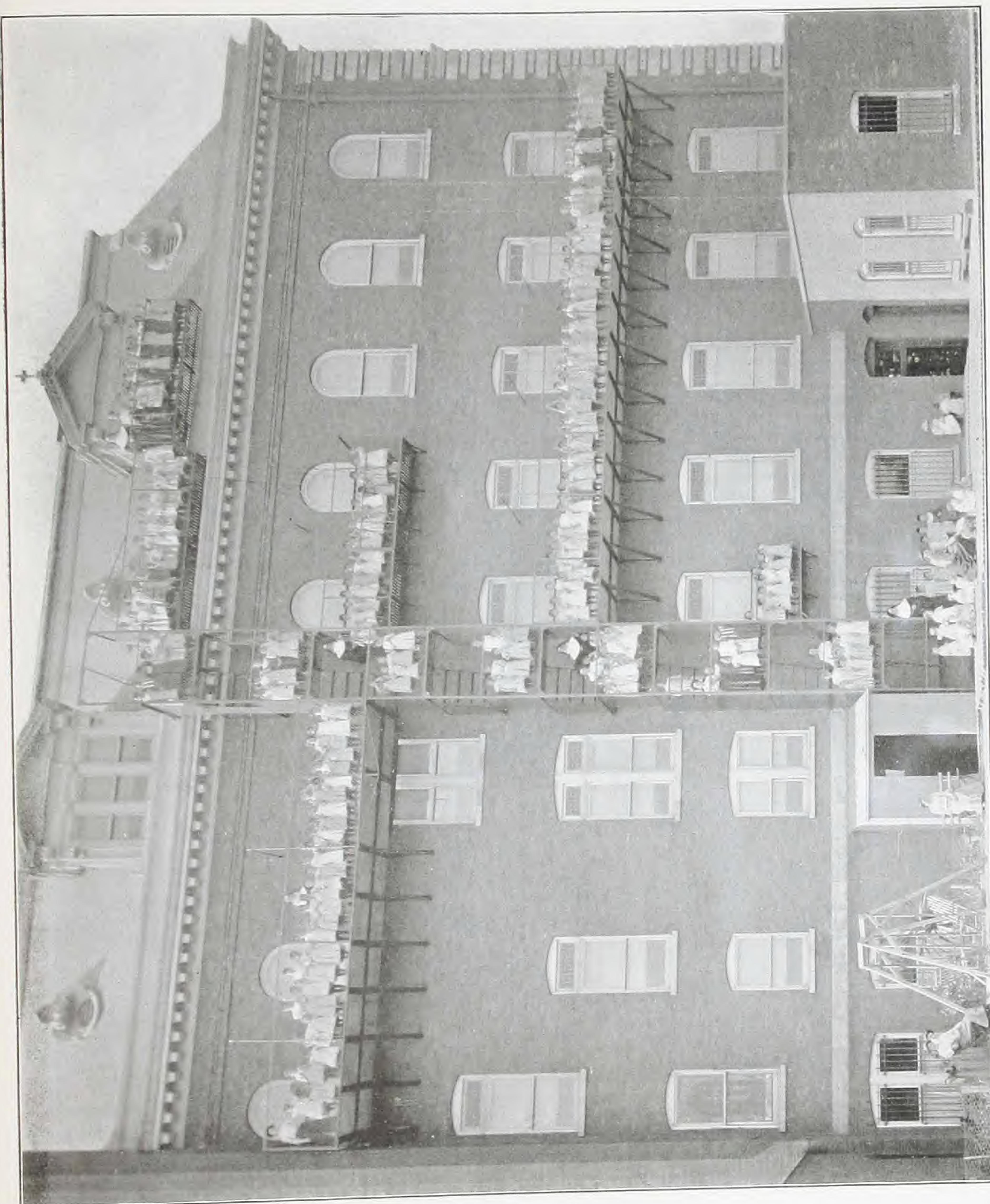
Borough of Manhattan.

Officially Recorded as the Best Fire Escape Made

Extract from Report made to His Excellency Henry B. Clews, Governor of Maine.

During the year the Inspector has examined the great variety of fire escapes, all possessing more or less of merit, but for effectiveness in delivering a burning building of its occupants and safety in their descent, the NATIONAL STAIR FIRE ESCAPES possess advantages over all others for capacity and safety. The main escape being placed between windows, preventing those descending from being cut off by fire. It is protected by wire netting three feet high, so that people cannot fall out while running down. The purchaser of these escapes receives full value for his money, and will have an escape that will save the lives of people in case of a disastrous fire, which is the object sought in putting up fire escapes.

(Signed) RICHARD F. CHALK,
Factory Inspector.



ANGEL GUARDIAN HOME, BROOKLYN, N. Y.
National System of Stair Fire Escapes, with Slate Floor Recreation Balconies.

ABOUT SCHOOL FIRES AND PUBLIC OPINION REGARDING FIRE ESCAPES.

The St. Francis School Burned Yesterday.

December 4th, 1899.

Thirteen victims lost their lives. Twelve little girls were buried in one lot in the Bonifice Cemetery. The catastrophe was the worst that has ever happened in Chicago, in the loss of life, and has thrown a gloom over the whole community.—Chicago Tribune.



The Grand Jury Acts.

January 10th, 1900.

The grand jury, which is now in session, has undertaken to inquire why school houses of the city are not fitted with outside fire escapes. The jury appointed a committee from among its own members to visit the school houses. The jury reported that, after due inspection, it was all right to count on fire drill when the building is not full of smoke and fire does not cut off the exit, but there are many times when the escapes on the outside of the building would be necessary. The grand jury will demand obedience to the law.—Sacramento, Cal., Bee.



Young Pupils Jump for their Lives

February 3d, 1900.

Fire at Trenton public school cuts off exit by halls and stairways, and forces escape by windows. With the escape cut off by the stairways the only hope left was the windows. One teacher only had the presence of mind to close the door leading into the hall. This kept the flames from coming into the school room before the children had been told what to do. One hundred and twenty-five children were obliged to jump. The injured were taken to St. Francis and Mercer Hospitals and surrounding homes. Blankets were brought to the rescue and about a score jumped and struck the blankets, bounding off and striking the ground, receiving injuries which could be treated at home. There were no fire escapes on the building.—Elizabeth, N. J., Journal.



Blame Fixed—No Fire Escapes Provided.

February 8th, 1900.

Transcript of evidence to be taken before the grand jury. Coroner Lloyd, assisted, concluded the inquest of the deaths known as "the victims of the St. Lawrence O'Toole's School fire," returning a verdict that they came to their death from suffocation in school building, due to smoke and fire. Also find that the aforesaid buildings were unprovided with fire escapes.—St. Louis, Mo., Chronicle.

Board of Education Responsible.

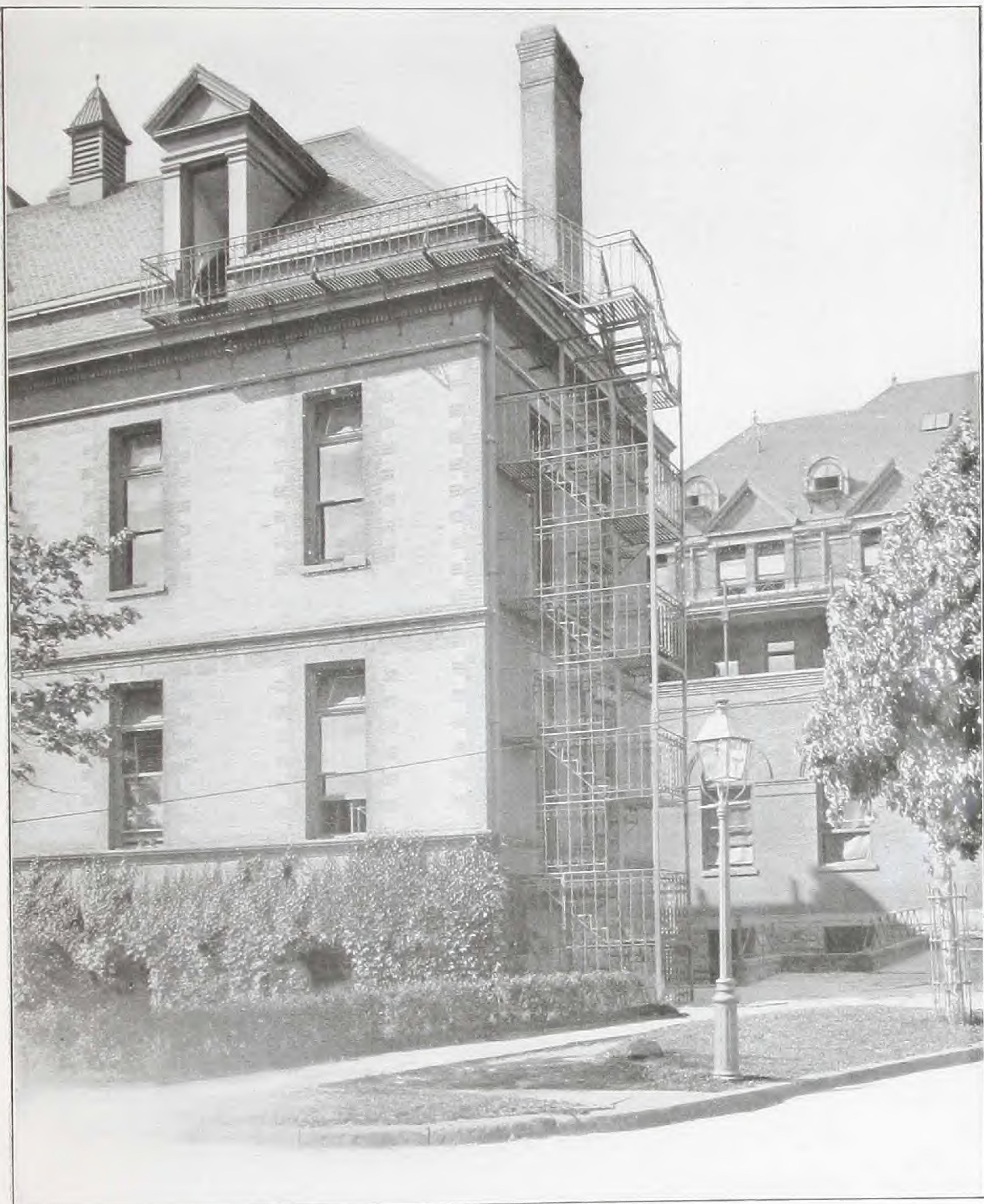
March 12th, 1900.

Under no circumstances ought fire escapes to be abolished. The lives of children are too precious to be trifled with in this manner. Instead of being an avenue of safety to children from burning buildings, ladders or open fire escapes would more likely be death traps. Even fire drills are apt to startle children. It is often difficult to prevent a panic on such occasions notwithstanding that they might have been warned of what was coming. Under such circumstances it can readily be imagined that should a fire occur a dread catastrophe might easily follow, unless the escapes provided are of such a character as to make serious injury impossible. The Board of Education is responsible for the safety of the children who attend public schools, but if it consents to the abolition of a contrivance which renders escape from a building in event of fire comparatively safe, and submits the substitution of another on which life and limb are risked, it not only disregards its duty, but becomes responsible for accidents which may occur. Should there be a cutting down of the cost of constructing school houses, it is the duty of the board to accomplish this by reducing the size of the building, and not by endangering the lives of the school children through the substitution of cheap and insufficient fire escapes for those which are the best and safest that can be procured.—Philadelphia, Pa., Public Ledger.



February 5th, 1900.

When the Board of Education has completed its investigation of the Livingston School fire, and makes its report to the public, it should not neglect to explain why the law requiring that school houses should be equipped with fire escapes was not complied with long ago. The unfortunate occurrence is apt to be repeated any time in any other school building in the city, and the members of the Board of Education should not undertake to dodge their share of the responsibility for the serious results of this fire. In view of the decision of public opinion over the action of the teachers, Misses Wright and Collins, a suspension, during investigation, seems warranted. Nothing has yet been shown that these women acted the part of cowards. It is well enough to talk about fire drills, and the teachers being able to control their pupils at the time of great excitement, but the truth is that the children pay little attention to what is said to them when they are thoroughly frightened. The sudden appearance of smoke in the school room, and the wild cry of fire from an excited boy, naturally drove all rational ideas out of the heads of the little ones. The stairs being filled with smoke, the little ones were obliged to leap from the windows without considering the consequences. Windows are the first means of escape from a building, considered by the children, and there is where the fire escapes would have been had the school been supplied with them.—Trenton, N. J., Gazette.



MONTEFIORE HOME, NEW YORK.

Showing one of three Ornamental National Fire Escapes, with which the building is equipped.

MAS
JJB

DEPARTMENT OF BUILDINGS.

BOROUGH HALL,
BOROUGH OF BROOKLYN.

JOHN GUILFOYLE.
COMMISSIONER

New York City

Sept. 14, 1900.

A. N. Holly, Manager

The National Iron Co.,

1123 Broadway,

Borough of Manhattan.

Gentlemen:

From general observation, coupled with its manner of construction and efficiency, the National System of Stair Fire Escape to my mind meets all requirements and I highly recommend it.

It is in place in this Borough on several of our large institutions.

Very respectfully,

John Guilfoyle

Commissioner of Buildings,
Borough of Brooklyn.

MAYOR'S OFFICE ✉ CITY OF EAST ORANGE ✉

EDWARD E. BRUEN,
MAYOR.

EAST ORANGE, N. J., April 12, 1900.

Mr A. N. Holly,

General Manager, National Iron Co.,

1123 Broadway, N.Y.

Dear Sir:-

I beg to acknowledge receipt of your letter of the 11th, inst. in relation to the "Stair Fire Escapes" recently placed on our school buildings, and in reply will say that we have had no cause to use them yet, but will say our City Officials, School Board and Citizens are well pleased with the construction and style of the Stairs, and the same has relieved their minds of any further anxiety in case of fire in any of the buildings equipped with your Fire Escapes.

I will be pleased to aid you in any manner, in recommending or exhibiting Fire Escapes to officers for any other municipality, in case you wish the same.

Very respectfully

Henry S. Munro,
Architect
Tuxedo Building.

Tarrytown, N.Y. 12-22-99

The National Iron Company,
1123 Broadway, N.Y. City

Gentlemen:-

Your workmen have just completed setting up the National Fire-escape on the new School-building at North Tarrytown, and I desire to express my entire satisfaction with it.

Perhaps it will please you to know, that I selected your fire escape only after examining several others and finding that yours was the best adapted for school-houses where children have to be taken care of in case of fire. The Board of Education will hold a special meeting next week and I will present your bill and a draft will be issued to you for the full amount.

Very truly yours,

Henry S. Munro

More Practical than any other Escape made. Best for preventing injury to Women and Children.

M Guggenheim & Sons

1123 Broadway
New York

30 Broad Street
New York December 22nd, 1899.

The National Iron Co.,
1123 Broadway, New York.

Gentlemen:-

I wish to express my entire satisfaction with the "National Stair Fire Escape" you have erected on the rear of my residence, No. 18 East 72nd Street.

This fire escape is more practical than anything I have seen as a safe and easy method of egress from a burning building. Its system of short stairway, with frequent landings, makes its use as convenient as that of an ordinary stairway, and it is exceptionally well devised for preventing any injury to women and children under the excitements incident to fleeing from a fire.

I feel confident that you have provided a fire escape that combines the best principles of security and convenience.

Very truly yours,

Alvah Guggenheim

MICHIGAN SOLDIERS' HOME.

BOARD OF MANAGERS

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COL. C. B. MINDSILL, QUARTERMASTER
DR. JNO. J. AUSTIN, SURGEON

Soldiers' Home, Kent Co., Mich. Jany. 10, 1900.

The National Iron Co.,

Gentlemen,

Last year, our Board of Managers decided to place Fire Escapes upon the Main Building of this Home, and after careful investigation and inquiry, selected those manufactured by your Company.

Over 500 members of the Home have quarters in this building, and as the majority of them are feeble and more or less disabled, it was necessary, in selecting an escape, to choose one that would, in the easiest and safest way, afford a means of egress for that class of persons, in case of fire.

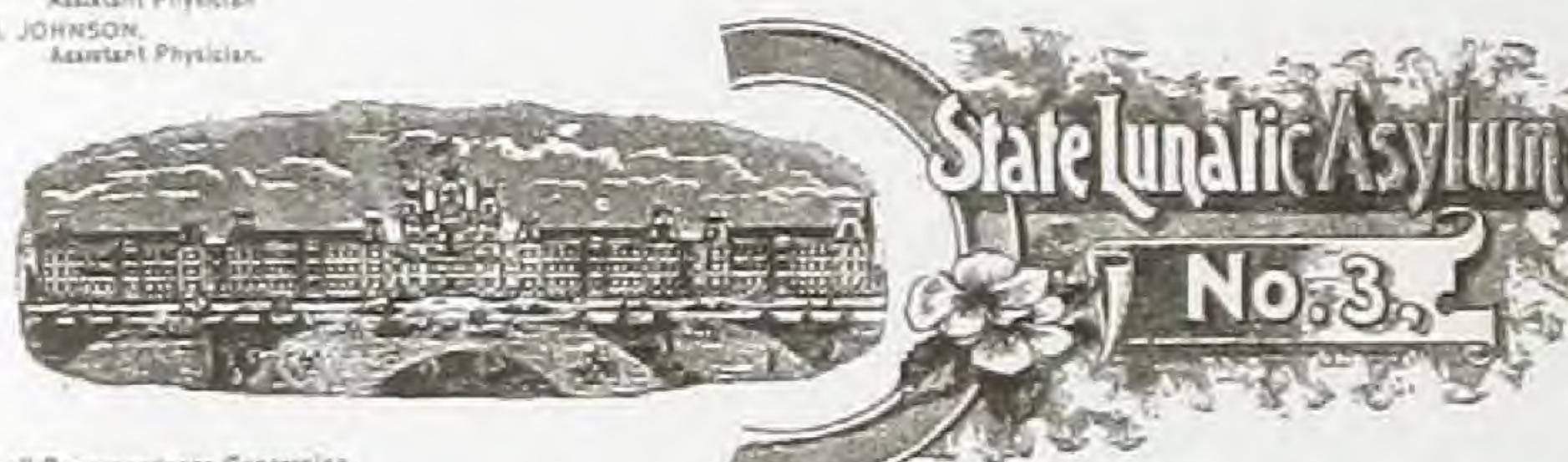
Yours was selected, because it best fulfilled those conditions, and we are satisfied, since they have been put in place, that we acted wisely, in choosing those made by you.

Yours Very Truly,

Geo. E. Judd
Commandant.

DR. F. GILLASPY,
Assistant Physician
DR. S. A. JOHNSON,
Assistant Physician.

JOSEPH HARPER,
Treasurer
J. S. GROSSHART,
Steward
MRS. D. C. ATKINSON,
Matron
JAS. R. ALLEN,
Secretary.



Address all Correspondence Concerning
Patients to
DR. J. F. ROBINSON, Superintendent.

Nevada, Mo. Jan. 12th, 1899.

NATIONAL IRON CO.,

New York City.

Dear Sirs:-

The two fire-escapes which were put in this institution by you are very satisfactory, and I can cheerfully recommend them to other institutions of this kind; First: because the short turns in them enable patients to catch, and, if they fall, they fall only a short distance, until they strike a landing; Second: on account of being so well screened there is no danger of their jumping over and committing suicide. They are rather ornamental in appearance, and do not look clumsy as many outside stairways do.

Very respectfully,

Supt.

J. F. Robinson

Office of
M. J. DIMMOCK,
Architect
F. A. I. A.

Richmond, Va. April 14, 1900.

The National Iron Co.,

Dear Sirs:

I desire to say I am much pleased with the Fire Escape you have just placed upon the new Theatre Building I designed and am erecting at Newport News, Va. It is the best arranged Fire Escape I have ever seen.

I have approved your account and sent it to the owner of the building for payment.

Yours truly,

M. J. Dimmock



OFFICE OF CHIEF ENGINEER,
Corner Tenth and Q Streets.

FIRE DEPARTMENT.

C. E. WEIDMAN,
Chief of Department.
W. A. WOODWARD,
Chairman Fire Committee.

Lincoln, Neb. Sept. 15 1899

National Iron Co.,
New York City.

Gentlemen:-

I consider the National System of Stair fire escapes the best made. They are simple in construction, besides durable and efficient, and in time of fire or panic - they will be found indispensable.

Respectfully,
C. E. Weidman

PARTIAL LIST OF BUILDINGS EQUIPPED WITH THE NATIONAL STAIR FIRE ESCAPES.

St. Peter's School.....	Brooklyn, N. Y.	Bank of Montclair.....	Montclair, N. J.
Hotel Stimpson	Athens, Pa.	St. Elizabeth's Asylum.....	St. Louis, Mo.
Athens High School.....	Athens, Pa.	Convent of Mercy.....	Brooklyn, N. Y.
American Bank Note Company (Cady, Berg & See, Archt.).....	Philadelphia, Pa.	St. Joseph's Orphan Asylum....	Brooklyn, N. Y.
Hudson River State Hospital, Chas. M. Pil- grim, Supt.)	Poughkeepsie	St. Monica's Orphan Asylum.....	Jamaica, L. I.
Apartment House 18th and Chestnut street, Philadelphia.		Memorial Hospital.....	Long Branch, N. J.
Westerly Collegial Institute.....	Staten Island	New High School.....	Glens Falls, N. Y.
Samuel Vernon Estate.....	New York City	High School.....	Tarrytown, N. Y.
Keeler's Hotel.....	Albany, N. Y.	Residence, 15 East 72d street....	New York City.
Masonic Temple.....	Elmira, N. Y.	Residence, 59 East 53d street....	New York City.
Riogrand Hotel.....	Atlantic City, N. J.	Public School, No. 8 Annex..	Greater New York.
Broad Street Theater (Jno. D. Allen, Archt.) Philadelphia, Pa.		Factory, O. P. Stacey Co.....	Rochester, N. Y.
Arverne Hotel.....	Arverne, L. I.	High School Building.....	Silver Creek, N. Y.
National Hotel.....	Far Rockaway, L. I.	High School Building.....	Bradford, Pa.
Crompton & Knowles Loom Works, Philadelphia.		Insane Asylum.....	Newberry, Mich.
Public School Buildings.....	Buffalo, N. Y.	High School Building.....	Sault St. Marie, Mich.
Hotel Agnew.....	Atlantic City, N. J.	Davenport Home.....	Bath, N. Y.
Hotel Nameoke.....	Far Rockaway, L. I.	Apartment Houses, 94 and 95 Central Park West	New York City.
Gustavus Adolphus Home.....	Jamestown, N. Y.	Opera House.....	Newport News, Va.
Montefiore Home (Buckman & Fox, Archts.) New Yo.k		Soldiers' Home.....	Grand Rapids, Mich.
Hotel Patterson (Buckman & Fox, Archts.) New York.		School Buildings.....	Montpelier, Vt.
Raleigh Hotel.....	Peekskill, N. Y.	St. Elizabeth Hospital.....	Appleton, Wis.
Albany Orphan Asylum (G. L. Heins, State Archt.)	Albany, N. Y.	Normal School Dormitory.....	Marquette, Mich.
Clara De Hirsch Home.....	New York City.	Public School.....	Sault St. Marie, Mich.
Colonial Club.....	Buffalo, N. Y.	Hon. J. M. Longyear (Hotel)....	Marquette, Mich.
Baker Underwear Company....	Tarrytown, N. Y.	Ethical Culture School.....	New York, N. Y.
Fox Memorial Hospital.....	Oneonta, N. Y.	Froebel Academy.....	Brooklyn, N. Y.
Convent of Divine Compassion, White Plains, N. Y.		District School.....	Hastings-on-Hudson, N. Y.
Naval Branch of Y. M. C. A. (Parish & Schroeder, Archts.).....	Brooklyn, N. Y.	Warrick Institute.....	Warwick, N. Y.
Nurses Home N. Y. Hospital (Cady, Berg & See, Archts.).		Normal School.....	Cortland, N. Y.
Central New York Institute for Deaf Mutes, Rome, N. Y.		High School.....	Buffalo, N. Y.
Western New York Institute for Deaf Mutes, Rochester, N. Y.		High School.....	Toledo, O.
Rome Custodial Asylum.....	Rome, N. Y.	School House.....	Wyandotte, Mich.
Binghamton State Hospital.....	Binghamton, N. Y.	School Houses.....	Glens Falls, N. Y.
G. L. Heins, Architect for above buildings.		High School.....	Detroit, Mich.
German Liederkrantz & Arion Socie.y Build- ings (Robert Manayckie, Archt.)		Bank Building.....	Rockford, Ill.
Christ Hospital.....	Jersey City, N. J.	School House.....	Reading, Mich.
Home for the Aged Women....	Jersey City, N. J.	High School.....	Saginaw, Mich.
Home for the Friendless.....	Buffalo, N. Y.	Factories	Saginaw, Mich.
Niagara Falls Hospital.....	Niagara Falls, N. Y.	Business Blocks.....	Bay City, Mich.
Rochester Orphan Asylum.....	Rochester, N. Y.	School Houses.....	Belleville, Ill.
Albany Hospital.....	Albany, N. Y.	School Houses.....	Oak Park, Ill.
Convent of Mercy.....	Syossatt, L. I.	Insane Asylum.....	Nevada, Mo.
The Angel Guardian Home....	Brooklyn, N. Y.	Hospital	St. Louis, Mo.
New Jersey Training School for Feeble Minded Girls and Boys.....	Vineland, N. J.	Turners Hall.....	Elgin, Ill.
New York Infant Asylum....	Mt. Vernon, N. Y.	Sherman Hospital.....	Elgin, Ill.
Central School Building.....	Medina, N. Y.	Elgin National Watch Works.....	Elgin, Ill.
House of St. Giles the Cripple..	Brooklyn, N. Y.	Third National Bank Block.....	Rockford, Ill.
McCready Building.....	New York.	Masonic Hall.....	Rockford, Ill.
River Crest Sanitarium.....	Astoria, L. I.	Talcott Building.....	Rockford, Ill.
Sweet's Hotel.....	Grand Rapids, Mich.	Office Buildings.....	London, Eng.
		High School.....	Flint, Mich.
		Journal Building.....	Lincoln, Neb.
		Opera House.....	St. Louis, Mo.
		Concordia Factory.....	St. Louis, Mo.
		Opera House.....	St. Marys, O.
		Asylum	Newberry, Mich.
		Atlas Hotel.....	Dayton, O.
		Normal School.....	Marquette, Mich.
		Hospital	Eau Claire, Wis.
		Hospital	Peoria, Ill.
		Hospital	Green Bay, Wis.
		Hospital	Chippewa Falls, Wis.
		Old National Bank Building.	Grand Rapids, Mich.
		St. Mary's Hospital.....	Saginaw, Mich.

TESTIMONIAL LETTERS.

JOHN D. ALLEN COMPANY,
Architects and Engineers,
John D. Allen, President.
1007-08 Betz Bld.

PHILADELPHIA, September 9th, 1902.

HARRIS SAFETY COMPANY, Philadelphia,
Pa.:

GENTLEMEN:—I am pleased to say that I have inspected your National Fire Escape stairs, which you have just finished installing at the South Broad Street Theatre, this city, and find same in every way satisfactory.

As a means of easy descent from upper floors I consider it the acme of perfection for the space it occupies.

Yours very truly,
(Signed) JOHN D. ALLEN.



EDUCATIONAL DEPARTMENT,
STATE OF FLORIDA,
Office of W. N. Sheats, Superintendent.

TALLAHASSEE, January 12th, 1898.

NATL. FIRE ESCAPE CO., 1125 Broadway,
New York City.

DEAR SIR:—I have examined your fire escapes and pronounce them the best I have seen. It is my judgment that all large school buildings of two or more stories should be provided with these escapes.

Yours truly,
W.M. N. SHEATS,
State Supt. Pub. Inst.



THE ETHICAL CULTURE SCHOOLS.

U. R. W. of the Society for Ethical Culture.
Superintendent's Office, 109 W. 54th St.

NEW YORK, April 26th, 1898.

NATIONAL IRON CO., Townsend Building,
City:

DEAR SIR:—I take this opportunity to express my approval of the fire escape which you have recently placed on the main building of the Ethical Culture Schools. It is much more satisfactory than our old fire escape with plain stairs, since it is impossible for a child to fall.

Very truly yours,
J. F. KEIGART, Supt.

OFFICE OF THE BUILDING INSPECTOR,
City of Elgin, Illinois,
W. R. Lynd, Building Inspector.

ELGIN, Ill., May 20th, 1898.

NATIONAL IRON CO., New York:

GENTLEMEN:—After careful investigation of all other fire escapes on the market, I am free to say that the "National Fire Escape" made by you is without exception the best made.

It embraces strength, simplicity, neatness in design and absolute safety, and has an unloading capacity greater than all others, and I recommend it to all wishing a fire escape that affords absolute protection.

Respectfully,
W. R. LYND, Building Inspector.



THE HEMMETER CIGAR CO.,
Fine Havana Cigars, 34 Woodward Ave.

DETROIT, Mich., January 5, 1900.

THE NATIONAL IRON CO., New York:

GENTLEMEN:—The Fire Escape you placed on our Saginaw Factory we can truly say has no equal. Shortly after same was completed fire broke out next door to our factory and we turned in a fire alarm. Out of one hundred and sixty hands, of which ninety per cent. were girls, about one hundred and twenty-five came down the Escape in two minutes with perfect ease and safety. Respectfully yours,

THE HEMMETER CIGAR CO.,
By J. P. Hemmeter, Mgr.



FACTORY INSPECTOR,
STATE OF INDIANA.
Room 122, State House,
D. H. McAbee, Inspector.

INDIANAPOLIS, Ind., May 23, 1899.

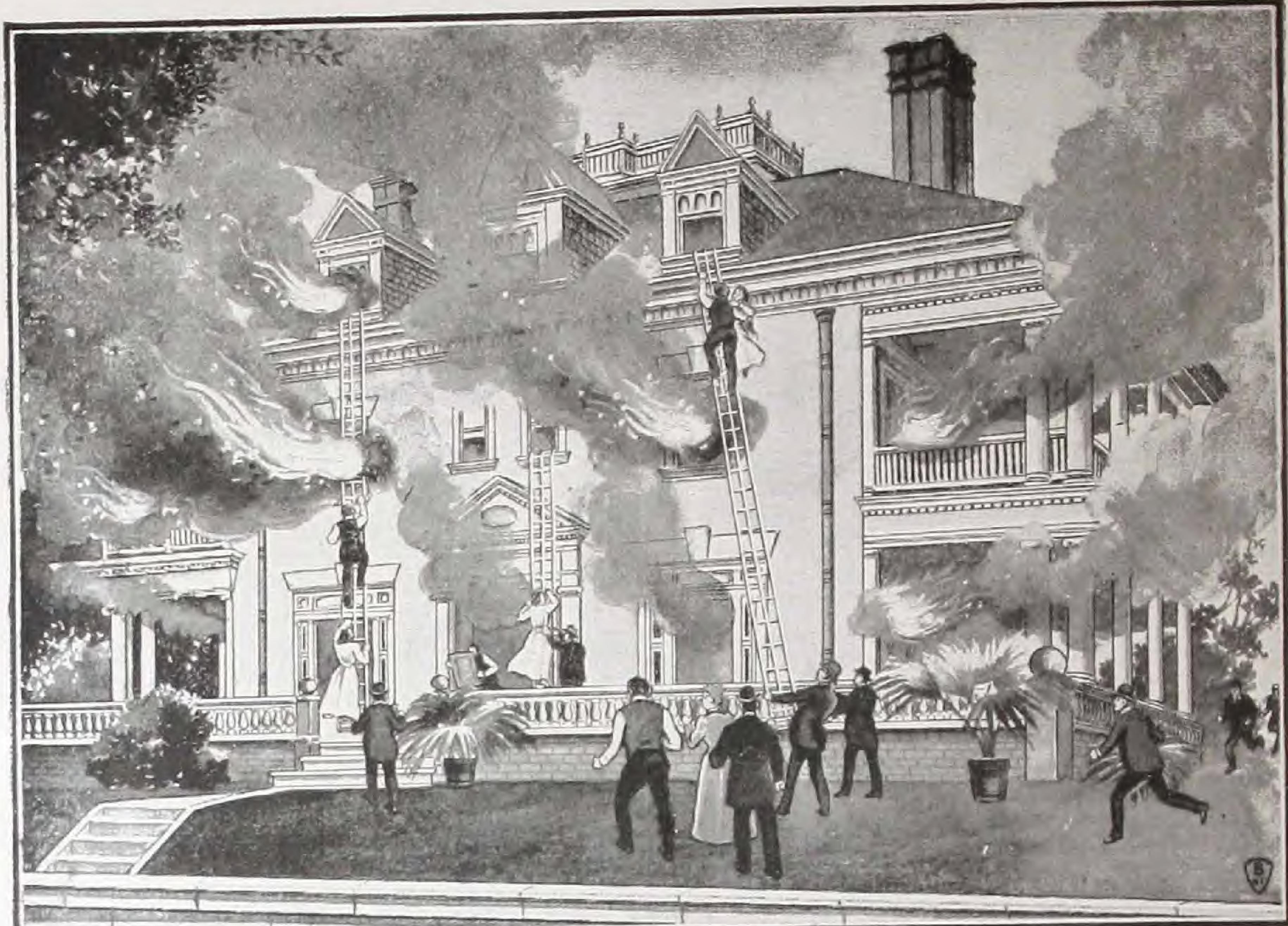
THE NATIONAL IRON CO., New York:

DEAR SIRS:—Yours of the 22d received and contents noted. I would be pleased to have the National used in place of the one prescribed by law. If a representative of your company were here it is possible he could do some business. The following hotels will have to have escapes placed upon them:

The Bates House, New Denison, Grand, possibly the English, and other smaller ones.

I know of no person at present who could represent your company in this city.

Yours very truly,
D. H. McAbee, Chief Inspector.



THE HARRIS STANDARD FIRE ESCAPE is constructed of three, especially made, cold drawn steel galvanized wire cables to which are attached by safety spring indentations, hollow steel copper plated rungs, fifteen inches in length, placed twelve inches apart.

The cables are secured at the top by a specially constructed steel ring with outside cable continuous. The Harris Escape is tested to two thousand five hundred pounds, and is compactly wound upon a reel which is enclosed in an oxidized metallic case. The fastening is securely made by four, two-inch steel screws, in the window sill or upon the base board.

THE HARRIS FIRE ESCAPE when thrown from a window provides a ladder reaching to the ground, so that immediate entrance may be made from outside and assistance given to a child or helpless person in a burning apartment before the arrival of firemen. In this respect it is superior to any exterior iron escape which under the law may be fourteen feet from the ground and beyond reach.

THE HARRIS FIRE ESCAPE, reaching to the ground, permits the descent of a person from an apartment without lifting and arranging a heavy iron ladder often rusted or frozen in place, or which may be beyond the strength of the person desiring to descend.

THE HARRIS FIRE ESCAPE may be drawn to one side of a burning window, which would prevent a safe descent upon an iron fire escape or stationary vertical ladder.

THE HARRIS FIRE ESCAPE being placed inside the building and therefore the temperature of the room affords a better hand clasp than the rungs of an exterior fire escape, which during the most dangerous portions of the year is often coated with ice or filled with frost.

THE HARRIS FIRE ESCAPE being inside a building is never covered with ice, snow or other obstruction. Outside iron fire escapes are often covered with boxes, flower-pots, barrels, ice-boxes and clothing.

THE HARRIS FIRE ESCAPE may be used as a cable to lower an unconscious or invalid person from an apartment to the street.

THE HARRIS FIRE ESCAPE does not disfigure the exterior of the building, afford entrance for thieves, or destroy the interior decorations of a room, as does the proper erection of an outside iron fire escape.

THE HARRIS FIRE ESCAPE can be placed in buildings of light construction which would not safely bear the additional weight of an exterior iron fire escape.

THE HARRIS FIRE ESCAPE, being placed inside of the building, does not require painting and is not weakened or rendered unsafe by the effects of rust or influences of the weather, as are outside iron escapes.

THE HARRIS FIRE ESCAPE does not provide a dangerous play ground for children, as do iron fire escapes, by which serious and fatal accidents often occur.

THE HARRIS FIRE ESCAPE affords a safe and easy means of descent to any person having sufficient strength to descend an outside fire escape of any kind.

THE HARRIS FIRE ESCAPE is submitted to severe tests and careful inspection by our expert mechanics, and are demonstrated by our mechanics when installed.

THE HARRIS FIRE ESCAPE is non-combustible and practically indestructible, is indorsed by leading architects and builders and approved by expert and official authorities everywhere.

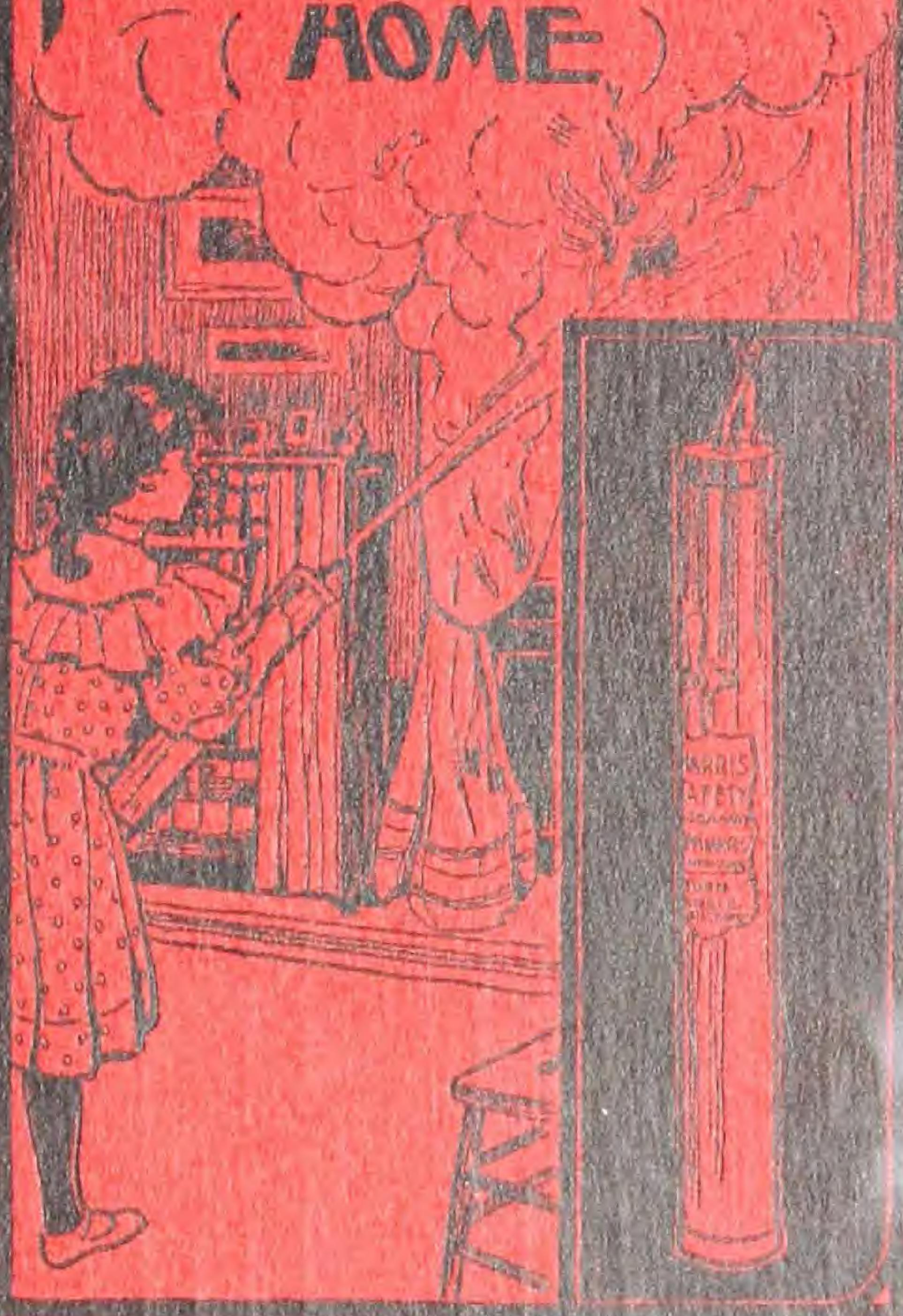
HARRIS SAFETY FIRE EXTINGUISHER

BEST
FOR
HOMES
EASILY
OPERATED
BY
WOMAN
OR CHILD

Size No. 2

PRICE \$10.50

PROTECT YOUR HOME



TEN

1. Inspection unnecessary. Acid in hermetically sealed glass tube. Deterioration impossible. Once charged, always ready.
2. Bursting impossible. No stop-cocks to hold pressure. Material Seamless Brass tubing, tested 450 pounds.
3. Chemical Action perfect; liquid will not injure person or damage property. Acid entirely neutralized in discharge.
4. Size and Weight adapted to home use; 25 inches high, 3 $\frac{1}{2}$ inches diameter; weight, 6 lbs., 10 lbs.
5. Easily operated. Discharged by half-turn in either direction of lever which also serves as handle in directing stream.
6. Very powerful. Throws stream 40 feet. Extinguishing power equals 5 barrels of water. Will surpass other Extinguishers of double liquid capacity.
7. Beautiful, ornamental. Heavy nickel-plated, looks well amid best of furnishings, unlike old-fashioned Copper Fire Extinguisher.
8. No Rubber Hose to harden or decay. No handling of acid. No accidental discharge by tipping or careless handling.
9. The Price for "Harris Safety No. 2" is \$10.50 complete with 3 full chemical charges. F. O. B. New York. Extra parts and charges supplied at moderate price.
10. A few of our many distinguished patrons.

WHYS

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